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THE ARMY BOOK
FOR THE
BRITISH EMPIRE.

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THE ARMY BOOK

FOR THE

BRITISH EMPIRE.

*A RECORD OF THE DEVELOPMENT AND PRESENT
COMPOSITION OF THE MILITARY FORCES AND
THEIR DUTIES IN PEACE AND WAR.*

BY

LIEUT.-GENERAL W. H. GOODENOUGH, R.A., C.B.,
"

AND

LIEUT.-COLONEL J. C. DALTON (H.P.), R.A.,

AIDED BY VARIOUS CONTRIBUTORS.

LONDON:

PRINTED FOR HER MAJESTY'S STATIONERY OFFICE,
BY HARRISON AND SONS, ST. MARTIN'S LANE,
PRINTERS IN ORDINARY TO HER MAJESTY.

And to be purchased, either directly or through any Bookseller, from
EYRE & SPOTTISWOODE, EAST HARDING STREET, FLEET STREET, E.C.; or
JOHN MENZIES & Co., 12, HANOVER STREET, EDINBURGH, and
90, WEST NILE STREET, GLASGOW; or
HODGES, FIGGIS, & Co., Limited, 104, GRAFTON STREET, DUBLIN.

1893.

Price Five Shillings.

U.A 64-9

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(Wt. 11827 4000 10 | 93 H & S 8782)

HENRY MORSE STEPHENS

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PREFACE.

THE purpose of the Army Book is to give to all its readers a comprehensive knowledge of the British army and military system. With this object in view, a certain amount of what is history must be introduced; not, however, as a main feature, but in order to give the reader a grasp of the antecedents of the army, of the experiences gained in war, and of the effect of these antecedents and experiences on the action of the statesmen who have been concerned in establishing the system in force.

Similarly, in the several chapters on the components of the army—infantry, cavalry, &c., what is historical in them will, it is thought, better conduce to the understanding of the spirit and best traditions of the arm concerned.

Matter of controversy has been unavoidable, but beyond the sincere endeavour to represent adequately the intention animating the measures of reform on which the army system is based, no attempt at controversy has been made nor is needed.

The example of the military organization of the principal powers of Europe has undoubtedly been before the country, while army reforms have been in progress; and as, though never strictly followed, the example has done much to inspire these reforms it will necessarily be often referred to. That organization, whose essence is short service with reserves, although it is applied in practice on the Continent on the largest scale, through the plan of universal obligation for military service—the nation in arms—has, as compared with former systems, distinctive features of detail as well

as of principle, so generally accepted by all the chief military powers as to be here designated the "modern system."

It is now twenty years since the first introduction into this country of the "modern system," in its English garb. Not only recruiting, and the regimental system of organization, but the Acts affecting the Army and regulations of all kinds have in this interval undergone a more or less complete revision or reconstruction, and the present moment appears more favourable than any in the past for describing the results.

Characteristic of the modern system is the increased interest evinced by all classes in each and every country in its military organization, means, and methods. This is very observable in the states of the Continent, particularly where universal service has been longest established. In Germany conversance with things military pervades all classes. In France the army is enthusiastically supported. In Austria where the legislative houses use their power of expression and criticism very freely, the close knowledge of the army displayed by them, as well as by the ordinary press, is remarkable. In this country the navy is our first line, and there is no cause to complain of the interest the public bestows on it. With the army, in whose excellence are involved so many questions of detail, the public interest and knowledge are further to seek, and the British legislature while equally responsible with that of any Continental nation is less endowed with the critical knowledge requisite for the use of its controlling power. This is probably to be accounted for by the circumstances of our national history.

But the tendency of the times is all towards improvement in these respects. Through the comparative frequency in late years of our small wars the national interest in the soldier has been raised. The institution of the war correspondent has supplied the popular demand: the growth and consolidation of the volunteer system have brought some features of the military career home to our daily life; this last cause has perhaps done more than any thing else to

popularize the army, formerly an exotic institution, strange, mistrusted, and engaging attention only in connection with history or when history was being made.

While welcoming this improvement and invoking more knowledge of military affairs, quality rather than quantity is perhaps what is most wanted. Even a positive experience of regimental life, however intense and sincere, may mislead as to the title of its possessor to the functions of a critic, when the subject for criticism is a military system owing its inspiration and its source to the deep-laid experience of the country, its statesmen and great officers; and whose results are deeply seated and broadly spread. It is not from its effect here and there that a true judgment of its value can be framed; this can only be attained by study, comparison, and the "enquiring wisely" which Solomon recommends.

And when the system is criticised, it is often overlooked how much has depended rather on the manipulation of it than on the system itself. Experience has to be bought; how difficult must it have been to graft into the habits of administration, engendered by the old hand-to-mouth policy, that careful foresight and sureness of aim which the "modern system" demands, with its rigid terms of engagement, and consequent fixed period for replacement of men. There are rules for the game, and their neglect brings its Nemesis as surely as the missing the mark in the Quentin play of our forefathers.

Nor is the question of the provision of fighting men the only one demanding attention. In the training of an army the great difficulty to be contended with lies in the enormous difference between its life and surroundings in peace, and the knowledge and qualities it must be ready to exhibit in war. It is unlike a navy which is always on active service, and whose officers are called on continually during their career to encounter danger, and incur the gravest responsibilities. For this reason alone army management may well be entitled to special consideration.

The general organization under which an officer of the army

works has a very important effect on the development of his character ; it affects the qualifications demanded of him at the outset of his career, the study and practice enjoined on him throughout his service, and last, but not least, the extent to which he is made, in each rank, to exercise responsibility. "As the tree falls so will it lie" ; as the service moulds the officer, so will he be. We may be well assured that in the aggregate, selection or no selection, the choice of men for high employment is limited to the officers the service can produce. Everything then depends on this—that the organization should be so devised as to supply officers of trained capacity equal on emergency to their higher duties.

In fine, this book is designed to offer to its readers an account of the existing army system and of its antecedents without knowledge of which no such progressive modifications as a healthy life demands can safely be undertaken.

A WORK of precisely the kind now presented to readers of all classes, military and civil, has not hitherto been attempted either officially or by private enterprise, and the Editors therefore feel they must beg the kind indulgence of their readers.

The work is arranged in four parts, of which Part I. is devoted to tracing out the gradual development of the British army system.

Part II. deals with the components of the army, as stated, with some reference to history. A detailed reproduction of official regulations has on principle been avoided. The text of such regulations is the sole authority : a list of those in force is issued with Army Orders for January, which can be purchased for twopence.

Part III. treats (1) of that important branch of the army Imperial and native, which is stationed in and provides for the safety and defence of our Indian Empire, and (2) of the forces raised in the Colonies for their own defence.

Part IV. deals with the army in war time, setting forth the situation which would obtain both at home and at the seat of war in the event of our having to mobilize for home defence, or of having to despatch an expeditionary force abroad.

The chapters have been generally arranged in numbered sub-headings, in the hope that this may facilitate study and reference.

Two maps have been prepared to illustrate certain parts of the work. Of these, No. 1 gives the arrangement of the military and regimental districts of the home army in the United Kingdom, and No. 2 shows concisely the coaling stations and Colonial defended ports of the British Empire, and the distribution of troops, Imperial and local, for their protection.

The Editors, impressed from the commencement of their labours with the necessity for ensuring that every part of the work should be written from personal knowledge, and not merely as a compilation, have obtained valuable assistance, freely and cordially rendered, from a number of officers and other gentlemen connected with the service, who have either written various chapters in their entirety, or have more or less identified themselves with the matter they contain.

From the many kind offers of assistance made them, the Editors know that had they been able to extend their demands for aid, these would have been cordially met, and the work would have benefited thereby: but to do this was impossible in the time available.

The thanks of the Editors are sincerely tendered to the undermentioned contributors, who have all, some to a greater and others to a less degree, afforded their valuable help, viz. :—

Major J. Adye, R.A.

Major Eustace Balfour, London Scottish R.V.

Colonel J. T. Barrington.

Mr. H. T. De la Bère, C.B.

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Colonel H. S. Reeves, C.B., A.Q.M.G.
Mr. Denham Robinson.
Lieut.-Colonel C. M. Watson, R.E., C.M.G.
Colonel Sir W. A. Eardley-Wilmot, Bart.

For the tables in the Appendix, the thanks of the Editors are due to Captain J. S. Cowans, R.B., and for the reproduction of the maps to Lieut.-Col. J. K. Trotter, R.A., also for kind help in other ways to Lieut.-General E. F. Chapman, R.A. C.B., Lieut.-General J. J. H. Gordon, C.B., Major J. Wolfe Murray, R.A., Lieutenant W. H. Cromie, R.E., Mr. W. Benett, Bengal Civil Service, and Mr. G. R. Hunter, Special Assistant to the Director of Artillery.

The Editors are also grateful to the many officers and officials of the War Office who have afforded them valuable help generally.

For the reproduction of the photograph which has been given as frontispiece, with the gracious permission of Her Majesty the Queen, the Editors have to thank Major-General Sir C. W. Wilson, R.E., K.C.B., K.C.M.G., and the officers of the Ordnance Survey department; the right to reproduce

the photograph having kindly been given by Mr. A. Bassano of 25, Old Bond Street. The Editors desire respectfully to acknowledge the kind sanction accorded by H.R.H. the Commander-in-Chief to his portrait being given in the book, and their thanks are due to Mr. Herman Herkomer who painted the picture, and to the officers of the Royal Engineers whose property it is, for the right to reproduce it, as well as to Messrs. A. Dixon and Son, of 112, Albany Street, for the use of the negative.

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PART I.

THE ARMY SYSTEM.

CHAPTER I.

IMPERIAL DEFENCE.

HISTORY records no development so remarkable as that of the British Empire, built up by the operation of natural forces rather than by national policy. The Colonial Empire of Rome was military in its essence, deliberately planned and systematically constructed. The modern German Empire has been achieved by the persistent dynastic purpose handed down from father to son along a line of Prussian sovereigns. Military pre-eminence, around which the scattered fragments of German-speaking peoples could group themselves, was a necessary condition of success; but this condition was fully realized from the first by the Hohenzollerns, and formed the basis of a continuous policy. Other Empires, generally short-lived, have been the creations of the genius for war or statecraft of individuals. The fortunes of Austria have been largely determined by royal marriages. The colonial development of ancient Greece presents numerous analogies to our own; but the offshoots of Athens and Sparta for the most part left the parent state as complete organizations carrying with them the machinery of government. The seeds of disintegration were thus early sown, and the successful colonies of Greece tended to become rival states, frequently at war with each other or with the mother country, which proved unable, in wealth, population, or power to preserve its ascendancy.

The building up the Colonial Empire of Great Britain has

been accomplished by a variety of methods. The instincts of a curiously mixed race and the supreme advantages of geographical position favoured, from the earliest days, the growth of Sea Power, and supplied a long succession of intrepid navigators and adventurers. The pressure of an increasing home population quickened enterprise, to which the habits of the people were eminently adapted. Even the desire to escape from religious or political oppression was not without influence upon the emigrating tendency. The rapid growth of manufactures due to the great and various mineral wealth of the country, created an ever-growing demand for available markets. If any leading principle of national policy can be discovered, it must probably be sought in the exigencies of trade. Such a policy was, however, unconsciously followed rather than deliberately adopted. Individual statesmen, as far back as the reign of Elizabeth, were able to grasp the coming needs of the nation, and to foresee the means by which alone these needs could be met ; but the pages of history do not reveal any clear continuity of direct purpose, and historians have largely failed to interpret the significance of the events they describe. The British Empire was an evolution, not a creation.

The wars of the Norman kings of England were mainly directed to the retention of their French dominions. The effort was foredoomed to failure. The expansion of England was not to involve any portion of the European Continent, save the rock of Gibraltar ; but the lesson had to be learned in blood and fire, and meanwhile the Crusades pointed the way to action in distant lands. The civil wars which ended with the establishment of the power of Edward IV., and the French wars of Henry VII. and Henry VIII. supplied no incentive to colonial enterprise. Under Elizabeth, the internal troubles arising out of the Reformation subsided ; the Scotch, disastrously defeated by Protector Somerset in 1547, ceased to make demands upon the resources of England ; trade was stimulated, and the navy, first established as a national force in the reign of Henry VII., was developed ;

expeditions sailed for many seas to follow up the discoveries of Columbus and Vasco da Gama ; the East India Company received its first patent. The greatest impetus to expansion was, however, probably supplied by the conflict with Spain. For the first time England found herself engaged in maritime war with a great power holding extra-European possessions, and carrying on a rich trade whose destruction provided a powerful spur to the ambitions of a race of sailors. All the conditions were thus favourable to a new departure, and the year 1606 saw the first public step towards the colonization of North America, in the charter granted to Virginia.

The process of expansion made great advances during the 17th century, checked for a time by civil war, but powerfully forwarded by the navy of the Commonwealth. The Dutch and Spanish wars of Cromwell, though contributing little directly to the territorial possessions of England, mark a veritable epoch in her development. The peculiar power of the tremendous weapon wielded by Blake could not escape recognition, and the inherent national capacity for naval warfare, which had been abundantly manifested in earlier days, received new and startling illustrations. In the capture of Jamaica from Spain in 1655, possibilities of action across the seas were revealed, which extended far beyond the actual gain. From this period, the conception of maritime supremacy and of all that maritime supremacy implies, may be said to date. This conception, since partially obscured, has recently reasserted itself as the cardinal factor of Imperial defence.

The Dutch wars of Charles II. were largely colonial in their objects, and their comparative failure in results was solely due to the inadequate naval means with which they were undertaken ; but meanwhile the settlements in North America were rapidly spreading along the Atlantic coast line. Pennsylvania and the Carolinas had been founded and the Dutch had been expelled from New York.

The Revolution placed the internal affairs of the kingdom on a firm basis, and the Union with Scotland, enacted in 1707,

brought a new and vigorous nationality to share in the work of expansion. France, the dominant power of Europe during the latter half of the 17th century, was crippled by the war of the Spanish Succession; and the treaty of Utrecht, in 1713, left Great Britain a world-wide state, while the Spanish monopoly of the Southern and Central American trade was brought to an end. The five great wars which beginning in 1739 extended with brief intervals to 1815, in spite of their varying fortunes, set the seal upon the greatness of the Empire. The colonies of France, built up with laborious care, almost disappeared. Those of Holland and Spain contributed to British growth, while as naval powers these states ceased to exist. Thus, though shorn of half a continent by the revolt of North America, Great Britain emerged from the long ordeal with maritime and colonial supremacy absolute and unquestioned. In India and in North America the rivalry of European powers was ended. Gibraltar, Malta, the Cape of Good Hope, important islands in many seas, and promising settlements scattered over the world remained as the spoils of conflicts whose real purport was little understood. The long struggle had, without special direction but inevitably, assumed the form of a contest for maritime ascendancy on the part of a nation to whom expansion was instinctive. Thus, while the inherent colonizing genius of the race enabled it to form flourishing settlements, the process of extension was at once stimulated and furthered by the rivalry of other nations who were first in the field; and war, however arising, became a means of colonial aggrandizement. Sea power, found necessary for the protection of trade became the weapon before which fell the older colonial systems of France, Spain, and Holland.

Expansion at the expense of European powers ended in 1815; but great additions have since been made to British India, and colonization pure and simple has proceeded with unabated vigour. The continent of Australia has become part of the Empire. In New Zealand, native wars have ended and a bright future lies before these favoured islands. In

Africa an enormous territorial extension has taken place, and the process shows no signs of reaching its limit. Meanwhile the important strategic and commercial centre of Hong Kong has been added to the Crown, and a large portion of Borneo and of New Guinea, together with Socotra near the southern outlet of the Red Sea, and many of the islands of the Pacific, have passed under the flag.

Other powers also are expanding their foreign dominions with much eagerness and varying success. France is seeking to build up an Indo-Chinese dominion, and already holds a large portion of North and West Africa and a foothold in Madagascar. Germany has entered into competition with Great Britain in East and West Africa, and has annexed a portion of New Guinea, New Britain, New Ireland and other Pacific islands. Italy is established on the Red Sea. Russia has made an enormous extension of territory in Central Asia and now marches with India,¹ China, and Persia; but with vast continental territories to absorb has not as yet crossed the seas. Although the United States have so far kept to the precepts of their founders, there are signs that expansion may be expected. The apparent purpose in these various extensions has been mainly commercial; but, in the case of France especially, strategic considerations have plainly influenced policy.

The problem of Imperial defence is one of extreme complexity in the case of an Empire built up of scattered fragments, embracing many nationalities and comprising forms of government widely differing. The variety of the processes by which, since the reign of Elizabeth, Greater Britain has been acquired, the extension in obedience to natural law rather than to deliberate design, and the constantly shifting phases of a development which has never ceased, have combined to obscure the issues and confuse the judgment. The popular histories on which the mind of the nation has been fed have largely failed to trace the lessons

¹ With Afghanistan, whose frontiers are delimited in concurrence with the Government of India.

of the past and to draw from them guidance for the future. Rare statesmen, such as Chatham, were too much occupied in building up the Empire to be able to study the means by which it might subsequently be knit together and held against the world.

After the long series of great wars which ended in 1815, it was natural that a period of reaction should set in, and that the stress of the past should be forgotten. The succeeding generation had ceased to remember what a great war implied, and the Crimean campaign found the army unprepared. Russia at this period was easily prevented by the British navy from external aggression, and the many lessons of the war did not directly touch the problem of Imperial defence. Even the fact that it was the navy which rendered possible the operations before Sebastopol was generally ignored.

In 1859, the fortifications of the French Channel ports having attracted public attention, a Royal Commission was appointed by Lord Palmerston, and an era of fortification supervened, spread over many years. Fortification, however, is not Imperial defence. Thus, when war appeared to be within a measurable distance in 1878 and apprehensions were widely felt out of all proportion to the risks, the nation was brought face to face with the unsolved problem. For the first time Greater Britain began to realize what war might imply, and the Australasian colonies at once initiated measures of local defence. The Royal Commission of 1879¹ followed, and for the first time, a general enquiry into the defensive needs of the Colonial Empire, the great trade routes, and the provision of a protected coal supply, was undertaken. The Report of this Commission laid down the coaling stations which it was considered necessary to defend with reference to trade, and drew attention to the paramount importance of the Cape of Good Hope, the strategic value of which had been half-forgotten since

¹ Royal Commission on the Defence of British Possessions and Commerce abroad; the Earl of Carnarvon, President.

the opening of the Suez canal. The question of the navy formed no part of the reference to the commissioners; but their enquiry inevitably led them to utter words of grave warning as to the adequacy of the force on which the whole structure of Imperial defence must rest. Incomplete and one-sided as necessarily was an enquiry, from which the navy, India, the fortresses of Gibraltar, Malta, Halifax and Bermuda, and home defence were excluded, it marks a definite step in advance—a real attempt to grapple with a portion of the problem. The exhaustive series of reports were completed in 1882, and action slowly followed on the lines laid down, quickened perhaps by the war scare of 1885, which, like that of 1878, was widely felt.

Progress had been made, however, especially in some of the Australasian colonies, and the national unpreparedness had at least been mitigated. Moreover, the problem of Imperial defence had begun to attract many minds, and as a natural result the naval requirements of the Empire began to be asserted. Naval history was studied no longer as a mere record of actions, but in the broad sense of its bearing upon the nation's past.

The curve representing the strength of the navy year by year is curiously suggestive. Each war is marked by a great rise; each scare can be distinctly traced. Peace, or the tranquillizing of the public alarm, is represented by a rapid descent. Individual writers have dwelt upon the great development of foreign navies and the enormous tasks which would devolve upon the British navy in the protection of trade. The essential change of conditions since the period of the French wars, and the dependence of the home population on an imported food-supply have been forcibly pointed out. The vital necessity for guarding the trade on which hangs the very existence of millions of people at home and abroad, and the inevitable disintegration which must follow the loss of maritime supremacy have been frequently urged.

Thus the nation has been gradually brought to realize the issues at stake, and the Naval Defence Act of 1889 was

distinctly the result of popular pressure. This important step was taken none too soon. The development of the French navy, checked for a time by the disasters of 1870–1 and by the great military expenditure since entailed, revived in 1886, when the annual sum provided for ship-building began to equal or exceed our own. Meanwhile the Russian navy has taken the third place in Europe.

The following table¹ gives approximately the strength in ships launched, or now building, of the three greatest naval powers:—

Powers.	Battleships.		Coast Defence.	Cruisers.			Look out Ships.	Torpedo Gun-boats.	Remarks.
	1st Class.	2nd Class.		Armoured.	Protected.	2nd and 3rd Class.			
Great Britain	38	13	12	18	11	51	19	32	
France ...	16	15*	21†	13	7	14	6	14	* 6 wooden. † 4 "
Russia ...	11	4	26	9	1	8	—	—	

It was officially stated at the time of the passing of the Act of 1889, that the object in view was to maintain the armoured ships of the British navy at a strength equivalent to that of the two greatest naval powers combined. Thus for the first time a partial basis for a definite building policy was laid down. It may be questioned, however, whether this policy is sufficiently far-reaching, and no satisfactory estimate of the national requirements can be arrived at without an exhaustive enquiry into the nature and extent of the duties which would have to be performed by the British navy under given contingencies. The responsibility for defining these contingencies rests with Her Majesty's government.

While the question of the navy has thus been forced prominently to the front, that of home defence has been dealt with under the recent mobilization schemes. (See Part IV.) A commencement towards the establishment of

¹ The figures are taken from Lord Brassey's Annual, 1892.

fortified positions round London, conjointly with the decentralization of certain stores, has been made.

Meanwhile the adjustment of responsibility for local defence has made progress. The withdrawal of Imperial troops from Australasia and from Canada (except Halifax) took place in the year 1870. A subsequent withdrawal for purposes of concentration of certain small garrisons in the West Indies has been carried out, in consequence of the recommendations of the Commission of 1879. It is now recognised that Imperial garrisons are maintained only at strategic points, or coaling stations,¹ held for the navy and the protection of mercantile vessels. In other cases, local defence, where advisable and possible, rests with the colonies concerned; but it is the avowed policy of Her Majesty's government to aid such communities as evince a determination to undertake measures for self-protection. At the same time it is recognised that local interests are guaranteed by the Imperial garrisons of coaling stations; and the colonies of Singapore, Hong Kong, Ceylon and Mauritius pay fixed annual contributions in aid of army votes. All the Australasian colonies have provided for their local defence—some of them on a large scale—but in the case of the positions of King George's Sound and Thursday Island, the importance of which is partly Imperial, armaments have been provided from army funds.² A similar arrangement has been accepted by Canada in regard to Esquimalt. The Australasian group further provides an annual sum for the maintenance in their waters of a special contingent to the Australian squadron, under a ten-years' agreement made with the Admiralty in 1887. The Imperial garrisons are reinforced by local militia or volunteers at the Cape of Good Hope, Singapore, Hong Kong, Ceylon, Malta, Bermuda, Jamaica, and St. Helena. Such forces, except at Malta³ and St. Helena, and where employed as auxiliary submarine

¹ See Map, No. 2, and, for definitions, p. 492.

² The garrisons and works are being provided at the joint cost of the Australian colonies.

³ The Royal Malta Artillery are regular troops.

miners, are, generally speaking, maintained from local funds. In addition, a force of native Indian artillery has been created for the service of the Eastern coaling stations, and an Indian infantry battalion has been raised for Hongkong. Canada provides a considerable militia capable of being rendered very efficient. Other colonies, such as Trinidad and British Guiana, maintain military organizations as well as armed police.¹

The general conditions of the problem of Imperial defence may now be briefly stated. The first postulate is the command of the sea. This, in the broad sense, does not imply that local superiority can be continuously maintained in all the waters of the world; but it does imply that an enemy's battle-ships are either defeated or decline fleet actions, that no hostile expeditions could be undertaken without the certainty of being intercepted, overtaken, or simply menaced by a superior naval force. If continuously maintained, it implies the gradual disappearance of an enemy's ships from the seas. Such command can be effectively asserted only by powerful sea-going squadrons able to take the initiative at the outset of war and capable of rapid expansion to meet unforeseen phases. History clearly shows that naval defence must be essentially and vigorously offensive. If the command of the sea is held by Great Britain, it is most improbable that the battle-ships of European powers would be employed out of European waters in face of the immense difficulties in assuring coal supply. On the other hand, British battle-ships should be capable of acting across long distances of sea.

Defended coaling stations are required for the refitting of ships of war, and for the temporary protection of mercantile vessels. If the command of the sea is lost, they become hostages to an enemy, and their maintenance will not materially affect the issues. Trade must be protected on the sea, and vessels locked up in fortified ports are almost as useless to the national cause as if captured. As regards

¹ See part iii. (Colonial Forces), chap. xxvii.

war vessels, the command of the sea will enable measures to be taken which will render coaling largely independent of fortified stations. That such stations are necessary, however, is undoubted, and the only question is that of the extent of their garrisons and fixed defences, into which a variety of considerations enter. Given the command of the sea, which is the primary condition of Imperial defence and which can be obtained and held by naval strength alone, what remains to be accomplished by local defence? The question thus resolves itself into an enquiry into the nature of the force which a possible enemy could employ in given waters, and the objects which might appear to him to justify inevitable risks. These subjects cannot here be dealt with. It is sufficient to state that under present conditions attacks with a view to a mere acquisition of territory, such as occurred when West Indian islands were regarded as profitable booty, would not constitute a policy according with the principles of modern war. The main efforts of an enemy must apparently be directed against British trade at sea, or with a view to inflict such blows as would increase the difficulty of the task of the protecting force—the Imperial navy. Steam which has conferred new powers of attack has at the same time rendered trade more easily defensible in the elasticity of courses which it permits. To be able to intercept steamers it is necessary to find them and to overtake them, which, except within moderate distance of a friendly port, involves difficulties of coal supply. Thus the command of the sea confers greater power now than formerly.

India is necessarily a prominent factor in Imperial defence; but, though the defence of India is a purely military question, this great possession was the direct fruit of sea power, and its military defence is possible only on condition of the retention of that power.

Imperial defence thus demands :—

- I. A Navy fully able to cope with that of a hostile power or powers, and local garrisons and defences scienti-

fically adjusted so as to guard all that the navy needs for its free action, to avert panics, and to prevent raids capable of inflicting serious destruction of national resources, whether in harbour or on shore.

II. Military forces able to provide, maintain and reinforce the garrison of India, and of the strategic points of the Empire, and further to furnish expeditionary forces to capture positions which on account of geographical conditions might aid an enemy's navy in menacing British trade. To capture such positions will usually be the most economical as well as the most decisive policy.

III. An organization directed to the fulfilment of the above objects, decentralized as far as possible, and providing that each defended station of the Empire, whether held by Imperial troops or Colonial forces, is kept in readiness for war. This includes stores adequate in amount and so distributed as to be immediately available to meet the most probable contingencies.

IV. The dissemination among the various members of the Empire of mutual knowledge of the preparations made, and the resources at disposal.

The great problem has not as yet been completely solved ; but indications are not wanting of the growth of wider views and a deeper insight into its conditions. The increase of knowledge of these conditions in the Colonies is marked, and the earnest efforts which are being made in some of them to bear their part in guaranteeing the national security, are among the most satisfactory signs of the times. The solution cannot be dictated, and is possible only by arriving at an understanding of the real needs of the Empire as a whole, and of the mutual interdependence of its scattered portions.

While the task thus demands the co-operation of Colonies of every degree, it rests with the mother country to guarantee the strength and efficiency of the national force under which

the Empire has been built up, and by which alone its ocean communications can be held in war. "The Royal Navy of England" wrote Blackstone more than a hundred years ago "hath ever been its greatest defence and ornament; it is its ancient and natural strength." Upon that navy now more than ever must rest the fabric of Imperial defence.

The remarkably appreciative reception accorded to the brilliant works of Captain A. T. Mahan, U.S.N., on the "Influence of Sea Power," confirms in a striking manner the estimate formed above, pp. 6-7, of the degree to which the public and professional mind is now ripe to take a broad view of naval history.

See also in connection with this chapter, Prof. Seeley's "Expansion of England."

CHAPTER II.

THE ARMY PRIOR TO 1872.

THE institution of a standing army in Great Britain may be held to have existed for two hundred years. A few regiments were retained on service at the Restoration, in 1660, but it was only after the accession of William III., that under the operation of the "Bill of Rights," the keeping up of a standing army was put on the legal footing which has been practically ever since maintained; witness in our present day the Act of Parliament which is annually submitted and, happily, as regularly passed into law by the legislature, under which the army obtains another twelve months' lease of life. The Act opens with the words, "whereas the raising or keeping a standing army within the United Kingdom of Great Britain and Ireland in time of peace, unless it be with the consent of Parliament, is against law;" and it goes on to specify the number of men authorized to be maintained. This *modus vivendi* is the outcome of the state of things described by Clode when he says, "the affairs of the army have been a source of perpetual conflict between the Crown and Parliament."¹

Not only the supply of men but the question of providing barracks to house them in gave recurrent occasions for this conflict, and it was not until 1792, a hundred years after William III.'s time, that barracks, as we understand them, became an institution. Parliament invariably refused to provide these barracks² on the ground that it would lead the Crown to retain an unnecessary number of troops. The country clung

¹ Clode's "Military Forces of the Crown," vol. i., p. 145.

² The same opposition was not, however, offered in Ireland where barracks were granted at an earlier date.

to the old tradition that forces should be raised for a war, and be disbanded when peace was proclaimed, and it long resisted the creation of an army prepared against eventualities, to meet the requirements of defence, to guard national interests, with a school of technical leadership and a trained *personnel* of men ready for expansion in time of war.

While the history of our standing army has been thus short, it was not marked by any great and radical changes until within the last two decades. England has suffered no Jena, nor any attack threatening her existence, and no system of conscription, except for the militia, has ever had to be employed.

A brief account of the principal features in this history will now be attempted, having regard chiefly to the experience gained and its outcome in relation to legislation in more recent years.

The original army in the reign of Charles II., from which we trace the origin of our present force of 227,300, and potential¹ 337,300 of all ranks, consisted of two regiments of horse and six of foot, numbering in all some five thousand men. Its affairs were directed by a General in chief command. In 1661 a Secretary at War was appointed, through whom, as political secretary for military business, the King's commands were issued. But it was not till about a hundred years later, in 1783, that, with the passing of Mr. Burke's Act, the Secretary at War came to be regarded as a minister responsible to Parliament.

As regards the constitution of the army and its up-keep in men, the regiment was the important entity and the colonel was a functionary on whom much depended.² Virtually, for the hundred years before Mr. Burke's Act, the regiment was recruited, paid, and kept up by a sort of contract between the Crown and the colonel.³ The latter received, through the

¹ These numbers include with the regular army, *only* Class I. army reserve, and the militia reserve. See Army Estimates, 1893/94.

² Before numbers were instituted, regiments were known by the names of their colonels.

³ Clode, vol. ii., p. 2.

regimental agent, the pay and allowances for the establishment, and made his own terms as to recruiting, through his captains; the allowance, which covered clothing, went to the "stock purse" of the regiment and, after settlement of the year's accounts, the balance was divided among the captains. The officers thus had a pecuniary interest in maintaining the regiment and preventing desertion and waste, but the door was open to fraud and false returns. Moreover when there was pressure for men, as was often the case, recruiting was "facilitated"¹ by arrangements for passing into the service bad characters, men from the criminal and vagabond classes. During this period, soldiers were allowed to be drafted for foreign service to any regiment, a measure attended with much hardship.

Fraud on the government and harsh treatment of the soldier were, for long, characteristics of our army institutions. They took deep root in the memories of the people, and generated a mistrust and a distaste for the military profession which is recognizable in a not inconsiderable degree even in the present day.

Taking the period approximately for the hundred years up to the Peace of 1815, we find that while the army fluctuated in numbers, according to whether the country was at peace or engaged in war, its peace strength at home was generally about 17,000.

In 1684 we find 15,000 men maintained for England and Ireland²; in 1711 the total strength of the army amounted to 201,000 men, largely composed of foreign troops.³ Under George I., in 1717, a force of 16,000 men was voted; from 1739 to 1747 the strength rose from 17,000 to 61,000, to fall in 1748 to 18,000. During the Seven Years' war it rose again to 67,000 at home and on the Continent, with 37,000 in the plantations and garrisons abroad, falling in 1763 to 17,000 at home and 28,000 abroad.⁴ Similarly the American war caused a great increase, and on its conclusion in 1783 the numbers dropped to the 17,000 odd, at which they remained until the wars of the French Revolution, 1793-94.

From that time to 1815 the army experienced a more or less progressive

¹ In 1779 an Act was passed for impressing soldiers. Thieves, too lame to run and too poor to bribe, were caught. But the soldiers considered it a grievous and cruel insult to have these men forced on them and loudly complained to their officers. Grose's "Mil. Antiquities," vol. i., p. 94, footnote.

² Grose, vol. i., p. 95.

³ Clode, vol. i., p. 260.

⁴ *Ibid.*, vol. i., pp. 272, 398.

development; after Waterloo large reductions were made, but "the peace establishment after, has assumed a far larger proportion than the peace establishment before, that event."¹

The contract of engagement of the soldier in these armies was for life, but this was very frequently modified when the army had to be augmented. Under Queen Anne a three years' term was general; in the special circumstances of 1745 men were enlisted for two years; and in 1759 and 1775 the term was three years or till the end of the war.

Repeated attempts were made in Parliament to give greater permanence to the system of enlistment for short periods, but in vain.²

During the Seven Years' war the militia was remodelled by Lord Chatham, the principle of the ballot and of a three years' service being adopted. This event had an important influence on the subsequent history of the standing army, to which the militia was destined from an early period to become an effective feeder.

It seems that so far back as 1752 the example of Prussia was held up to us for imitation. Mr. Thornton, when introducing the Militia Bill in that year promised that

"when this plan, limited as it is, shall take place we shall become a war-like and formidable nation; by such a plan Prussia . . . has acquired a weight and influence which renders her superior to states with a larger extent of country and inhabitants," and he went on to show the advantage we should have "whenever we pursue our own interest with equal sagacity and diligence. Hitherto a policy not to be comprehended by every understanding had been preferred of paying large subsidies for foreign assistance rather than the obtaining a natural force of our own men."³

The commencement of the long struggle of war with France, lasting from 1793 to 1815, found the standing army modified in its constitution and government by Burke's Act of 1783, before referred to. The regiments had ceased to manage their financial affairs and recruiting; the War Office establishment had increased under the direction of a parliamentary Secretary at War; and the duties of Commander-

¹ Clode, vol. i., p. 274.

² Parliamentary History, pp. 25, 27.

³ *Ibid.*, vol. ii., chap. xv.

in-Chief were assigned to a general officer, Lord Amherst,¹ whereby a larger measure of continuity was given to the government and discipline of the army.²

In 1792 the regular army (including India) numbered over 57,000 men, but the demand for more men rapidly became imperative. The militia was embodied, it was enrolled by ballot, and substitutes were allowed who were highly paid; the effect of this was to raise the cost of recruiting for the regular army,³ as every intending recruit was disposed to give his services to the militia; but if he passed thence to the regular army he was adjudged guilty of desertion.

X Under these circumstances special Acts were passed permitting enlistment into the army from the militia and pardoning those who had already so enlisted. In 1799, there were as many as 15,000 who thus volunteered to the regular army; the standard was 5 feet 4 inches, the bounty ten guineas, the area of service was limited to Europe, and the term of enlistment was for five years or during the continuance of the war. Thus the bounty on entering the regular army was kept within some sort of limits.⁴

The ballot has been called the parent of high bounties, but it is well to remember that it is not the ballot itself but the mode of applying it that was to blame in a system which allowed a purchased substitute to give his services in lieu of those of the man chosen. At a later period, 1808, when the local militia was raised, ballot without the privilege of substitute became the rule, and at the same time men were enlisted who came forward voluntarily for a small bounty. It was found that the great majority were enlisted

¹ To be shortly after (in 1795) succeeded by H.R.H. the Duke of York, who held the post till 1814, receiving the thanks of Parliament for his services in this office.

² It was at this period—viz., in 1788, that the "Principles of military movements, illustrated by manœuvres of the Prussian troops and by the British campaign in Germany in 1757," were published by Colonel Dundas, in consequence "of the want of uniformity and method long felt and to which a remedy was earnestly and universally desired." The system of manœuvring then inculcated was that adopted during the long wars which so shortly after ensued.

³ Clode, vol. i., p. 289.

⁴ *Ibid.*, pp. 285, 286.

in this way,¹ and the reduction of the bounty in 1809 from two guineas to one is evidence that the force was easily raised. The substitute system had operated in quite another manner. In 1803-4 out of 45,492 men raised for the militia by the operation of the ballot, no less than 40,998 were substitutes, and there was a waste by desertion and death of 8,106 men.

The policy of Mr. Pitt was to make the militia a regular feeder for the army. In 1805 each regiment of the line that was to receive recruits had a regiment of militia attached to it, and, under certain restrictions as to numbers, volunteers from the militia were systematically passed into the army. A grant of bounty and a slightly higher pay operated as inducements for men to volunteer, and the numbers obtained were considerable, *e.g.*, 27,000 men in twelve months, 1807-8. X

But, in describing the development of the connection of the militia with the standing army, the course of events has been somewhat anticipated.

With the rupture of the peace which succeeded the conclusion of the treaty of Amiens, and the establishment of Napoleon's camp at Boulogne, there commenced a long period, from 1803 to 1805, of imminent danger of invasion.

At this time the military force of the United Kingdom, abroad and at home, consisted of 150,950 men, of whom 98,314 belonged to the regular army and the remainder to the militia. The regular infantry at home numbered only 39,370 men. "This force was so infinitely disproportional to the effective resistance of the formidable army expected to be brought against us, that Government felt it their duty to increase it by every means the country afforded."² Numerous measures for the increase of the defensive forces of the country at large were passed, notably, as regards the standing army, Mr. Pitt's "Additional Forces Act," which established the principle of second or reserve

¹ 32,811 by ballot and 151,148 otherwise (Col. Stanley's Militia Committee, 1876, p. 557). ² Sir J. W. Gordon's "Military Transactions," p. 1.

battalions to regiments abroad and with a county connection.¹

Now that the peril of invasion was brought home to the minds of the inhabitants of this country, the patriotism of her citizens was aroused and very strong volunteer corps were speedily raised.

X Springing from a crude organization of early date and on the authority of Acts passed in 1802, a force of volunteers, shown in the estimates of 1803-4 as of 463,000 men, was raised for local (not as in recent times, 1859, for general) service.

The numbers seem to have been thought excessive, all the more so as they were ill distributed, and although in theory the volunteers were drawn from a higher class than that ordinarily furnishing recruits to the army, it was felt that too many men were locked up in the volunteer corps to the detriment of the general recruiting. As was satirically said by Mr. Windham of the Prime Minister, Addington, "the Right Honourable gentleman has not only not provided an army, but has rendered it impossible that an army should be provided."² Nevertheless it cannot be doubted that whatever its immediate effects on recruiting, this great and vigorous national movement did much to stimulate the warlike spirit of the country, and its power of endurance; and indirectly (if not directly) led to the maintenance of that army and navy whose exertions for the succeeding twelve years made Napoleon regard Great Britain as the most formidable and persistent of his foes.

With the advent of the Peninsular war, following on prolonged efforts in other quarters of the globe, the strain on the army proper increased. In the years 1805, 1807, and 1809, from returns taken about the 1st of June in each year,

¹ For summary of Acts of this period, see Col. Stanley's "Militia Committee," 1876, p. 580, *et seq.* and Sir J. W. Gordon's "Military Transactions," *supt.*

² Clode, vol. i., pp. 814, 816.

our forces, exclusive of volunteers, stood, in round numbers, thus :—¹

Distribution of the Army.				1805	1807	1809
Mediterranean	..	..	..	10,000	26,500	22,000
West Indies	..	..	..	16,000	18,000	21,000
East Indies	..	..	..	12,000	14,500	19,800
North America	..	..	..	4,000	4,500	8,000
Ceylon	..	..	..	7,000	4,700	5,000
South America	..	..	..	—	6,000	—
Cape of Good Hope	..	..	..	—	4,000	5,800
New South Wales	..	..	..	—	500	1,300
With Gen. Craufurd	..	..	..	—	4,000	—
Madeira	..	..	..	—	—	900
Portugal	..	..	..	—	—	22,600
On passage	..	..	..	12,000	9,300	4,200
Regulars { Total abroad..				61,000	92,000	110,600
{ In United Kingdom				98,000	87,500	108,500
Militia	..	..	..	76,700	77,800	65,000

In this latter year, 1809, the population of the United Kingdom being 14,942,646, the total strength of the British forces was 821,650 including seamen and marines,² viz :—

Infantry and Cavalry	{	Regulars and Militia	285,398
		Local Militia ..	198,534
Volunteers	{	Great Britain ..	114,066
		Ireland	75,340
Marines	..	..	31,400
Seamen	..	..	98,600
Artillery and Engineers	..	..	14,261
H.E.I.Co's. European troops	..	..	4,051

Reckoning regulars, general militia, and seamen alone, this gives a percentage of 2·9 men with respect to the population.

In the previous year, 1808, an important and comprehensive measure, interesting for what it failed to achieve, as well as for its degree of success, had been introduced by Lord Castlereagh. This was the Bill for the so-called “Local Militia,” to be raised by ballot without substitute,³ as the reserve force for the country, an institution by means of which a large proportion of the male population should be

¹ “Military Transactions,” supt., pp. 13, 16, 18.

² *Ibid.*, p. 19.

³ See chap. xxii. and *ante* p. 18.

trained to arms.¹ With this reserve in existence, the tendency of Government was thereafter to use the general militia rather as an offensive than a defensive force.²

Although still unrepealed, the laws for raising the local militia ceased to be put in force in 1816, and thus this institution, large in its conception, failed to maintain an actual footing in our military arrangements.

During the height of the great war, therefore, we had in the first line the standing army, in the second the general (or regular) militia, which, as the war went on, was more and more used abroad, and in the third the local militia together with such as survived of the volunteer corps (68,000 in 1812).

With the desire to popularise service in the standing army Mr. Windham had, in 1806, introduced the principle of short service enlistments. Until then, although short engagements had been resorted to spasmodically, the ordinary term of enlistment was for life. The recruit was now to be enlisted for 7 years in the infantry, 10 in the cavalry, and 12 in the artillery with power to renew the engagement, and with, for the first time, title to pension. This last proviso apparently weighted the measure. The bounty and levy money, which in 1805, had been close on £40, fell, for short service enlistments, to £30 3s. 6d.;³ but as it was found that in the generality of cases the men would enlist for the longer term if offered a small increase of bounty, Mr. Windham's measure was modified by Lord Castlereagh in 1808, and the recruit had the alternative offered him of enlisting for a term of years or for life.⁴

In 1811 the method of obtaining men from the general militia for the army was further systematized, so as to ensure

¹ In 1812 there were 250 regiments of local militia with 214,000 men enrolled, the establishment being 240,000.

² Militia Committee, 1876, app., p. 527.

³ *Ibid.*, app. xvii.

⁴ This law was acted on till the middle of the dead period, 1829, when limited enlistment was abolished, to be reintroduced with modifications in 1847. Thus it was only from 1783 to 1806, and, since then, for the 18 years from 1829 to 1847, that the long service system pure and simple was in force, during which latter period of course there was a minimum pressure for men.

that the supply should be annual and not spasmodic as heretofore;¹ the militia was allowed to enlist men supernumerary to the establishment, in anticipation of future vacancies through volunteering to the regular forces, and was to recruit by beat of drum and not by ballot. The evil of the ballot system appears to have reached a climax in the previous year, as we read in the "Annual Register" for 1810, that "£60 was last week [in February] paid at Plymouth for a substitute for the militia. One man went on condition of receiving 4s. per day during the war, and another sold himself for 7s. 3d. per lb.!"²

In 1813 it was reckoned that of 249,851 recruits for the army, raised in the ten years since 1803, 99,755 came to it through the militia, and although a bounty was paid to these men both on entering the militia and on passing to the regulars, it was claimed that the militia recruit did not cost more than the recruit who joined the army direct.

Although good head was made against increasing demands we do not find that even with this measure of success the requirements were met. In 1807 the numbers wanting to complete the army were 42,000; in 1808 with an establishment augmented from 221,000 to 226,000 the deficiency was still 22,000, and in 1813 on an establishment of 255,428 it was 24,959.³

The variation in the standard of height is instructive: in 1802 it was 5 feet 7 inches; in 1803, 5 feet 5 inches; in 1812, 5 feet 4 inches (or for young men of 18 years of age, 5 feet 3 inches);⁴ for general service in 1813 it was 5 feet 3 inches, or at 17 years of age 5 feet; and men were admitted up to 40 years of age. As to cost, in 1804 the bounty was 19 guineas, and the levy money the same: in the aggregate the two remained constant, with small variations, up to 1813.

In 1814 the standard rose and the bounty fell, but never-

¹ Clode, vol. i., p. 298.

² Ann. Register 1810, p. 282, and Clode.

³ Returns, from 1800 to 1814, are given in the report of Col. Stanley's Committee of 1876, see pp. 544, 546.

⁴ In 1803, for the "Additional Forces" no man (according to the Act) was to be disqualified for service who was 5 feet 2 inches in stature.

theless our army in France in 1814-15 was not composed of old soldiers or what we should call fine men. At Waterloo many regiments consisted of mere boys, and old officers relate that in appearance and physique they compared unfavourably with their Continental allies.

After the great war the army entered, in 1819, on a long period of peace conditions which lasted till 1854. The war had been successful, the country was glad to be rid of military questions, and, while chary of supplies, was content to leave military legislation to take care of itself.

Except for the army itself, with its glorious traditions, or because of these, we were left after all our experience but slenderly provided with permanent defensive institutions available for future needs. There was no militia enrolled, local or general, no reserve of any kind, and the volunteers had disappeared. This dead period outlasted the living memory of the days gone by, and when a revival of military interest supervened, the scattered records of history were with difficulty available as the sole resource of the inquirer.

To emerge from this position was the more difficult, as the central military administration was weakly organized, being divided between the Secretary of State for the colonies, the Secretary at War, the Commander-in-Chief, and the Master-General and Board of Ordnance, of which latter Mr. Burke had advocated the abolition as early as 1780.¹

Such reserve as there was in the cadres of the militia was under the Home Secretary.

The Secretary of State was only concerned with the army in war time—the Secretary at War was not in the Cabinet.

Thus the ministry as a body was not brought into relation

¹ The prescience of great statesmen is here remarkably illustrated. Mr. Clode, writing in 1868, records of Burke on this occasion, that "he proposed to render the civil subordinate to the military—to send the military branch to the army and the naval to the admiralty. . . to execute by contract all that could be so executed, and lastly to have all estimates approved and all moneys expended under the Treasury." Nothing of the kind was done adds Mr. Clode. It has been reserved to our own day, within the last five years, to witness a fulfilment of Mr. Burke's recommendations in each particular.

with the army, nor was occasion given for its more important members to occupy themselves with army matters. From being in the first rank of national interests the concerns of the army fell to a third rank.¹ Some occupation was found for the army both at home and abroad in duties since recognized as belonging to the police.

Under these circumstances the army, as known to our immediate predecessors who lived during the long years of peace after the great war, was thus distributed.

Total of all arms.	In 1821. ²	In 1854.
Gibraltar	3,252	4,134
Ionian Islands	5,280 {	3,854
Malta		3,893
West Coast of Africa		869
St. Helena	—	495
Cape of Good Hope	2,218	5,765
Mauritius	1,473	1,814
Hong Kong	—	687
Ceylon	2,968	3,448 ⁴
N. S. Wales and Van Diemen's Land	1,093 {	3,381
New Zealand	—	
Canada	3,892	3,336
Nova Scotia and Bermuda	3,070	3,240
Newfoundland	63	—
Jamaica, Bahamas, and Honduras	3,668	2,276
Windward and Leeward Islands	4,240	3,062 ⁴
Total in Colonies	81,572	89,754
East Indies, exclusive of Company's troops	19,267	29,208
At home and on passage home	50,192	71,081
General total	101,031 ³	140,043

¹ It is noteworthy that except by the Master-General of the Ordnance, who, however, figured for the sake of his military opinion, he not being responsible for the administration of the army, this latter was not represented in the Cabinet from 1816 to 1854.

² In 1821 the establishment was lowest and we therefore select it to compare with 1854 (1 Jan.) just before the Crimean war.

The chief augmentations of the army during this period were:—In 1824–26, 13,723; 1840–41, 3,541; 1843–44, 6,913; 1846–47, 8,597; and 1848–50, 16,042, diminished by 4,000 men in the following year 1850–51.

³ From 1819–29 our small horse artillery force had but 2 guns per troop; in the latter year those in Ireland were given 4 guns, and in 1843 all were made up to 4 guns.

⁴ The extraordinary numbers of troops maintained in the Colonies, even

There can be no doubt that during the period of the long peace the service of the soldier had far too much of a penal character, yet, at a time when the annual demand for recruits was small, it might have been expected that we should make our own terms. This penal character is illustrated by the conditions attached to discharge. Under the life engagement, shorter periods having been abolished in 1829, there was no escape from the service until the man could be invalided or discharged to pension.¹

Discharges were permitted as a reward for good conduct, and were ordered by court-martial in extreme cases of misconduct; but there was no middle course, and practically each regiment had to nurse its own bad characters. This bore fruit in the severe disciplinary measures it was deemed necessary to enforce.²

This was the period when punishment by flogging was in full force, sentences of 300 to 500 lashes being common, and this degrading punishment³ was inflicted in profound peace for military offences which nowadays would be checked by light imprisonment.

The tone thus given to the service was long enduring,

in the most unhealthy, has been generally believed to have been due to a desire to keep the army out of the way as the only means of preserving it from more wholesale reduction.

¹ Clode, vol. ii., p. 43.

² Desertion was the principal crime, and neither shooting nor flogging (up to 2,000 lashes) seem to have had any effect. Up to 1830 a R. C. M. could award 300 lashes, and in 1831 a D. C. M. might not exceed 500. A G.C.M. appears to have had no limit assigned to it. In 1838 no corporal punishment was to exceed 200 lashes. In 1848 this was limited to 50 lashes. According to the Annual Register for 1847, (p. 127), Earl Grey when introducing the "Army Service Act" to the House in that year, said that so lately as 1825 a man was sentenced to 1,900 lashes and received 1,200. There "was still much to be done, particularly in the encouragement of good soldiers who . . . were not in a much better position than the bad and undeserving. . . the soldier's life was regarded as a state of slavery on account of the enlistment being for life. He wished discharge to be a punishment, and to be able to say to the men if they were not good soldiers they should not stay in the army." At this time soldiers enlisted after 1832-33 only got 6d. a day pension after 21 years' service.

³ Punishment by flogging was abolished in 1881 after prolonged controversy and prognostication of evil which has, happily, in no way been realized either in peace or during the active service in which the army has since been so frequently engaged.

nor even now are remedies for it unneeded. All armies are highly conservative institutions, and the enforcement in ours of a severely repressive system led to the establishment of a school of thought and of treatment, which lasted long after the abandonment of the system itself had been decreed. Whatever the central administration may do in promoting a change of management, the real difficulty constantly lies in eradicating or at all events in modifying the opinions prevalent both within and without the service. Even recently, "voices from the ranks" have not been wanting in the public press advocating flogging, and branding for desertion and misconduct, measures which the administration have definitely repudiated.

There seems every reason to believe that the measure permitting corps to be purged of their bad characters through summary discharge by order of the general commanding is supported in an increasing degree by opinion within the service. This does much to make soldiering a reward, not a punishment. The total discharges for misconduct during the first and last five years of the period from 1872-91 have been 8,745 and 8,703 respectively. That the conduct of the army has improved during the same period the following figures will prove, viz.:—Between the years 1887-91 the percentage of courts-martial to strength was 8·4 against 10·8 in 1872-76. Of minor punishments in the same period there were 1,120·2 per 1,000 as against 1,395·8. Of fines for drunkenness there were 180·6 per 1,000 against 274·8.

It seems clear therefore that conduct having improved while discharges for misconduct have remained the same, it is the standard which has altered, and that, judged by the opinion of the service itself, a higher standard of conduct in the ranks of our army is demanded now than obtained even so late as twenty years back.

But to resume. In 1846-48 an augmentation of the army took place, following on one of less magnitude effected three years previously. The pressure for men increased, the system of enlistment for life gave way, and a great change was effected when, with the passing of the "Army Service Act" of 1847, enlistment for ten years came into force. This, with the re-establishment of the militia in 1852, marks the revival from the lethargy which affected military affairs after the long peace.

In the latter year, a bill for raising the general militia by volunteering (the ballot, though still legal, being suspended)

was accepted. The good service rendered by the militia to the army in the old war, by supplying it with men, was referred to in the debate on this bill; nevertheless no provision whatever was made therein for passing militiamen to the line. This may be given as an instance of the length to which forgetfulness of past experience may be carried, as well as of what we may charitably regard as the difficulty inherent in legislating on military affairs. It was not long before the omission was felt in a practical shape. Within two years we had the Crimean war; men were wanted and the Secretary at War seems to have had no hesitation in giving bounties to encourage volunteering from the militia. Some 25,000 to 30,000 men were so passed into the army; but the proceeding was illegal, penalties were in force, and to recover them prosecutions were instituted. Little wonder if this "interfered, as some thought, with the *morale* of the men."¹

Thus at the commencement of the Crimean war we possessed an army raised under the conditions above described and distributed as shown on p. 25. At the back of this army there was no reserve whatever except the militia (if it could be called a reserve), *plus* 10,000 pensioners enrolled under the Act of 1843, whose services might, if tendered voluntarily, be accepted for garrison duty at home; and it was governed by the heterogeneous administration already referred to on p. 24.

The painful nature of the experiences met with owing to this state of unpreparedness need not be dwelt on here, though there will be occasion to refer to them incidentally in subsequent chapters. One redeeming feature, beyond that of the high qualities displayed by the troops engaged, may be mentioned, and that is the pluck and endurance manifested by the country and population at large up to the very end of a contest which it was fully prepared to continue, and was only induced to abandon after much hesitation.

¹ Clode, vol. i., pp. 307, 308.

During the war, the want of soldiers was so severely felt that once again, though, it is to be hoped, for the last time, resort was had to the unworthy practice of raising foreign troops or mercenaries, a measure which, as we have noticed on p. 17, was condemned a hundred years before, in 1752. This proceeding, which may justly be termed by the historian as immoral in the last degree, took shape in a so-called "foreign legion," got together (on principles somewhat similar to those on which Wallenstein's army was raised) by a foreign adventurer, chiefly in the northern parts of Germany. We had German, Swiss and Italian regiments. They were officered partly by foreigners, and, as the only satisfactory feature, partly by Englishmen who at that time had served in some numbers in the Austrian service and had left it to join their own flag.

The strain occasioned by the Crimean war was continued after its close during the campaigns consequent on the Indian mutiny 1857-59, and the Chinese war of 1860. From this date to that of 1872, given at the head of this chapter, the period was one of transition.

The Indian mutiny, leading as it did to the assumption of the direct rule of the Indian Empire by the Queen's government on the 1st of January, 1859, threw new obligations on our army and its administrators. These obligations have modified in so important a degree the subsequent history of our army, and the whole nature of its duties, that it becomes necessary to record the reason for the policy then determined upon.

CHAPTER III.

NEW OBLIGATIONS IN INDIA.

THE convulsion which shook India some 35 years ago was destined to exercise an important influence on the military policy of Great Britain.

After the revolt in 1857 of the Sepoy army of Bengal which with all other Indian Provinces had up to then been under the administration of the East India Company, Her Majesty's government caused a proclamation to be made throughout India on January 1, 1859, announcing the assumption of the direct rule of the country by the Queen. From that time it became the duty of those responsible for the organization of the British army to provide the troops for the entire European garrison of India, whose strength in combatants went far towards equalling the total force in the mother country and her colonies.

This new obligation thus laid on the army became the chief feature in its life, whether in regard to the duties it imposed, of having to keep up a constant supply of trained soldiers, or to the privileges it conferred of extended professional employment.

In making this statement, the result of the prolonged deliberations which led to the adoption of the system on which this large army was to be maintained abroad has been somewhat anticipated. It is proposed in this chapter to review those deliberations, and to endeavour to enable the reader to understand the views underlying the policy then adopted, and now pursued. As to the success of that policy it may be noted here that, by general admission, the army in India has never stood higher in repute than now, and that as regards suitability of age, and physical and professional fitness, its standard is a high one.

Prior to 1859 the Honourable East India Company itself raised and maintained a considerable proportion of the European army for India. In 1856, for example, it provided nine battalions of European infantry and the whole of the artillery, a large part of the latter (some 6,000 men) being European; and also the engineers.

From 1781 to 1799 the H.E.I.C. enlisted its own European troops and was authorised to keep in depôt in England 2,000 men in war-time and half that number in peace. Before the earlier date the Company had enlisted its men anywhere it could, and it was said that if the British army at that period was composed of scum, the Indian regiments consisted of scourgings! "The history of those early days records a succession of mutinies in which the black and the white troops were alternately employed to coerce each other. The latter were composed of the scourgings of almost every European nation, kidnapped or wheedled on board ship by crimps."¹ Traditions die hard in an army and it took long to obliterate from the regiments of the Company's service the traces of those disorderly times.

After 1799 the Crown enlisted and transferred recruits to the Company for an agreed sum; the latter training them at the Indian depôt, which was situated at Warley in Essex.

The remainder of the European garrison—viz., four regiments of cavalry and twenty-two battalions of infantry, belonged to the British army, and were styled in India "Queen's troops." The establishment of the latter was 30,000, bringing the strength of the European force in India to about 40,000. The total army numbered 280,000 men, the balance being composed of 155 native infantry, and 21 native cavalry regiments.

The command was vested in the Commanders-in-Chief in each of the three Presidencies of Bengal, Madras, and Bombay, the Commander-in-Chief in Bengal having control over the Queen's regiments (but not over the other troops) in the remaining Presidencies. The staff was to some extent duplicated, that of the Queen's troops being distinct from the Company's.²

With the mutiny of 1857 a large part of the native

¹ See Chesney's "Indian Polity," pp. 277, 278.

² Besides a full staff for the Indian army, we had for the Queen's troops, an Adjutant-General and Quartermaster-General at Headquarters, each with a deputy; also in Madras, a D.A.G., D.Q.M.G., and Brigade-Major; in Bombay, a D.A.G., and in Calcutta, a Brigade-Major.

army in Bengal had practically disbanded itself, leaving the officers of a number of cadres of regiments on pay without employment. Some new cavalry regiments were raised for the Company, but when, in November, 1858, the *fiat* went forth for the Company's rule to cease, it became evident that the question as to the future constitution of the garrison for India, and particularly of the European portion thereof, was to be one of the first for settlement.

A Royal Commission under the presidency of General Peel, Secretary of State for War, was deputed to deliberate on this question. H.R.H. the Duke of Cambridge, then, as now, Commander-in-Chief, was one of the members. It was decided to have no local European army; that the whole of the artillery should be on the same footing as the Royal Artillery; and that there should be no native artillery except that required for service in exceptional or unhealthy parts of the country. This ruling was accepted and has since been maintained.¹

Such a change was naturally attended with much controversy. The Royal Commission was itself divided; its report expresses "the strong and sincere conviction" of the majority as well as the views of the minority. It is noteworthy that, with some remarkable exceptions, it was the members of the actual government of India, with the Governor-General Lord Canning, assisted by Colonel Sir Henry Durand, Bengal Engineers, who inspired and upheld the minority of the Royal Commission. Of the witnesses who came before it, it was chiefly those who were independent, or who belonged to the Royal service while enjoying Indian experience, whose views were adopted by the majority.

It must be remembered that before the Royal Commission

¹ The result was the absorption of the Company's European regiments and artillery into the Royal army, which was then (in 1862-63) to provide a garrison for India of 69,000 Europeans of all arms. This number sank to 61,000 in 1870-71. In 1867-68 the effectives in India reached the minimum strength since the Mutiny—viz., 55,000. (Report on East India Finance, 1873.)

signed their report, an experiment had been made in raising and sending out three regiments of cavalry for local service under the Company in India. These turned out very unsatisfactorily. With the idea of having light men to suit the light horses of the country the standard of height had been materially lowered, which seems to have entailed a corresponding lowering of prestige, and, possibly, of *morale*. These regiments then, nicknamed "dumpees," hastily raised, quickly fell into discredit, and the ill-starred experiment was abandoned.

A further and more important deterrent to the acceptance of a local army came in the shape of the so-called "white mutiny," which occurred early in 1859, when the local European troops, including the "dumpees," refused to do duty, on the ground that, by the terms of their enlistment, they were not liable to compulsory transfer from the Company's to the Queen's service. The law officers of the Crown subsequently showed that their liability was absolute, but the Commander-in-Chief, Lord Clyde, held at the time that there was a strong case for reference. The lesson of the whole matter was, that insufficient respect had been paid to the feeling which Lord Hardinge had long before spoken of as the most characteristic of the British soldier—viz., jealousy of "what he thinks his rights." But, legality apart, the fact of a mutiny having occurred had a strong effect in further discrediting the system of having a large army officered and maintained permanently abroad.

It seems clear that in advocating a perpetuation of the local army in India, Lord Canning was both upholding the original arrangement, and desired a force over which his government would have control, and which could not, in any emergency arising in Europe, be withdrawn from India, a contingency as to which the advocates of the government of India were jealously apprehensive. He thus avoided the putting forward any scheme dependent on materials not his own to dispose of, and he was propounding a method which would serve the ends of economy, inasmuch as it would find

employment for the officers of the mutinied native regiments.¹

Lord Canning's proposal was to form, for Bengal alone, thirty local battalions of European infantry to serve side by side with fifteen battalions of Queen's troops. The other two Presidencies of Madras and Bombay were apparently to be garrisoned by local and Queen's troops in similar proportion. The whole of the artillery in India and a large part of the cavalry were to be local.² He, in common with others, held very strongly that both the Queen's and the local army should be represented in India; the latter would be greatly benefited by the example of the former, and the former would be a check on the latter. He desired a preponderance in the numbers of the local army in order that its tone should not be lowered through being inferior in numbers and consequently in prestige.³

Sir W. Mansfield, the Chief of the Staff in India, whose evidence was written under the belief that the retention of a local army had been already decided on, deemed it absolutely necessary that Queen's regiments should periodically visit India. Comparing the local regiments with the Queen's, Sir William wrote that "although good and fighting well, there is by no means the same healthy tone of discipline running through the body in the one and in the other. . . . It was by no means uncommon to see extraordinary sloth and debauchery in such old (local) regiments . . . that the officers have become so enervated by climate, or other causes, that they are unable to check the one and to do away with the other."⁴

The minority of the Royal Commission thought a powerful local army necessary to maintain our rule; a body of officers identified with the country was wanted; they feared

¹ Report of the Royal Commission on the Organization of the Indian Army, 1859, app., No. 55, § 17, pp. 57, 58.

² *Ibid.*, pp. 58, 90.

³ Lord Ellenborough thought that there should be two armies, Queen's and local, and that the "balance of strength" of each should be preserved. (*Ibid.*, app., No. 3, p. 7.)

⁴ *Ibid.*, app., No. 62, p. 101.

the fusion of the local European force with the line would deteriorate the position and destroy the *esprit de corps* of officers serving with native troops, who would feel themselves reduced to a level below that of their brother officers of the line.

The government of India required a body of officers from whom they could take those needed for employment with native troops, or in connection with the government of the country. Formerly it was from the regular regiments of native infantry, fully officered, that this supply was drawn (to a degree, be it observed, rather detrimental to their efficiency); now the native regiments were to be put on the so-called irregular footing, each with a restricted number of officers, and as Sir W. Mansfield put it, and as is the case at present, each "appointment to a native regiment should be held to be a staff appointment." The question, therefore, as to where the many officers required by the Indian government were to come from, became urgent.

At that period, the officers of the Queen's regiments had been held, and had perhaps held themselves, much aloof from Indian concerns. Appointments and employment in India were almost exclusively reserved for Company's officers. Hence the Queen's troops, or Imperial army, were not reckoned on as a source from which to supply the officers required. Since then the Imperial service has been made the stepping stone for Indian employment and a large area for selection has been obtained, which may perhaps be further expanded as intercourse with India improves.

The Indian government itself was not, however, entirely united. Lord Elphinstone, Governor of Bombay,¹ was of opinion that it was not "sound reason" for having a local army to say that by this means alone could India ensure the retention of its garrison. No government would venture to withdraw the troops. He recorded his view that it was "impossible any local troops can be really equal to the British line; they

¹ Report of Royal Commission, app., No. 67, p. 143.

must always be conscious of a species of inferiority. They do not fight the battles of England on the battle-fields of Europe." He desired to have the best article, and thought the true policy was to relieve the troops more frequently instead of keeping them till their health was ruined.

In framing their report, the Commission had before them, among others, the opinion of Sir Harry Smith, founded on all the evidence, that no European local force should be maintained. It was also brought to light that Lord Cornwallis in 1794, and the Duke of Wellington in 1812, had expressed their opinions to the Board of Control that the European portion of the army in India should be troops of the line.

H.R.H. the Duke of Cambridge, in a minute attached to the report of the Royal Commission wrote, "The object of our legislation should be to have one European army for the whole Empire, including India," and this, "on Imperial and military grounds . . ." He felt "the firmest conviction that nothing but mischief can result from the jealousies, divisions, and heart-burnings which must be inherent in any double army organization." He went on to recommend that the Company's nine European regiments should at once be numbered with the line, though for the present, employed exclusively in India, that the whole of the Company's artillery should be made a second regiment of, and be assimilated in organization to, the Royal Artillery, and that the same course should be taken with the Company's engineers, except that they should retain a more permanent local Indian character, as they must be largely composed of natives, the officers being free to exchange.

After reviewing these arguments the majority of the Royal Commission recorded its opinion—

"that it does not appear that any case in history can be adduced of the co-existence of two distinct armies supplied from the same sources . . . (and) serving the same Sovereign. . . . However good the local force of the late East India Company has proved itself to be, still . . . a local force deteriorates more than one which by frequent relief, has infused into it fresh European notions and feelings, and a vigorous system of European discipline,

and that this would more particularly be the case in a climate like India, where according to the statistical statement of Sir Alex. Tulloch, backed by the professional opinion of Dr. Martin (himself an advocate for a local army), and others, the European constitution can never be said to become acclimatized, but on the contrary, deteriorates, gradually and surely in increasing ratio.

“That the resources of the state as regards Imperial purposes, would be crippled, by having a large body of its troops placed solely under the control of the government of India.

“That the very fact of the local troops not being enabled to share in the battle-fields of Europe is a great disadvantage to them, and may lead to a feeling of inferiority on their part which would be extremely prejudicial to their general discipline; and that while the Crown ought to possess the advantage of giving to its army the most extended sphere of action, the very nature of a double army would in a great measure deprive the line army of the valuable experience it would acquire in India, whilst the local army would in like manner be debarred from all the benefits of field service in Europe.

“That no government, under any circumstances, would ever venture to withdraw from India the troops necessary for its defence. The question as to the force to be maintained in that country must be always decided by the home government, responsible to the Sovereign and to the country, through parliament.

“That regulations could be drawn up for retaining in India officers of the line army whose services might be required by the local government, and that officers of the line would, undoubtedly, qualify themselves for employment in India, if such employment and all the advantages attending it, were open to them; and so far from the resources of the Governor-General being curtailed by such an arrangement, it would, on the contrary, afford him a much larger field for the selection of able and useful officers. . . .”

Such was the gravity of the question that before the Royal Commission had assembled, the Queen, in the exercise of her royal prerogative as head of the army, had addressed a letter to the Prime Minister on the subject, which is referred to by Sir Theodore Martin in his “Life of the Prince Consort.”¹ The Queen’s letter to Lord Derby, 1st September, 1858, pointed out that as to the whole army,

“whether English or Indian, there can with due regard to the public interest be only one head and one general command . . . the advice of the Commander-in-Chief at home ought to be heard on all questions affecting the troops and he ought to be kept officially informed of whatever affects their discipline and general efficiency. This in no way interferes with the authority of the Governor-General and Commander-in-Chief in

India on all points connected with the employment and maintenance of the army in that country."

Some of the Indian Council held the view that the forces in India, though forces of Her Majesty, were to be exempt from the conditions which attached to those forces in every other part of Her Majesty's dominions, and a memorandum in that sense was submitted to the Queen. The issues at stake were felt to be of Imperial importance and the views Her Majesty entertained were embodied by the Prince Consort in a memorandum of 16th October, 1858. In it the relations of the Commander-in-Chief in India to the Commanders-in-Chief in Madras and Bombay were condemned, as causing the latter to be

"perfectly independent of the former as regards the Company's or local forces, but subordinate to him as regards those of Her Majesty (*i.e.*, the Queen's regiments)."

The want of unity of command was pointed out to have resulted in the

"mutiny of the whole of the native army in one Presidency, and a state of discipline in the local European troops characterized as disgraceful by some of the most competent judges on the spot, and nothing but jealousy and animosity between the different services. The Queen's troops have alone, after being some years in the country, preserved an efficient discipline—and over them the authority of the Commander-in-Chief extended throughout India—while he was controlled by the Commander-in-Chief at home, acting under the immediate authority of the Crown. Here is the true chain of responsibility."

X These views took effect in the Act (23 and 24 Vict., cap. 100), which provided that the whole of the European forces employed in India should form part of the Queen's army disposable for general service. The measure was warmly supported by Lord Clyde, recently Commander-in-Chief in India, as the only means of securing that unity in command and discipline which was indispensable to the efficiency of the army in India, and the want of which had been productive of great inconvenience and danger.

Ample opportunity was given for the full ventilation of the question; the Indian official opinions were very fully stated, but the judgments of those in England, of the lookers on, who generally see the most of the game, pre-

vailed. The advice tendered was local, the decision given, with fuller knowledge and power, was Imperial. The opinions of the majority of the Royal Commission, and their recommendations as above recorded, were accepted, and on them our policy and action has been shaped and still rests.

In the result, as we have seen, the decision was that there was to be no local army of Europeans. Looking back, it seems natural that the representatives of the existing system should have advocated its maintenance and development. They were, above all things, loyal to the immediate interests of India, and were justly proud of the best traditions of the service of the Company, which under them and their predecessors, had been conducted gloriously for so many years.

Apart from other considerations which we have noticed already, there was yet this, that the fame of the more distinguished Indian officers was notorious in India and, in fact, in the world. Why should they not be trusted to shape the new Indian army? Indeed, it was the fame of these officers which may well have led the members of the Royal Commission to deplore that such power and ability should be locked up in India, and to seek to throw the service open. It must, moreover, have been fresh in their memories how frequently during the Crimean war it was made a subject of outspoken regret that we had not our body of experienced Indian officers to draw upon for employment in that campaign, and they must have felt that the national resources in this respect had not been well utilized.

As the Company's rule had ceased, and as it was allowed that the officers might be interchangeable between the two services, what, it may be asked, would have been the essential feature of such a local army as the majority of the Royal Commission seemed to dread? How should it be defined? To this the reply might have been given then as now. A local army is one whose regiments are never relieved, whose order books, records, and traditions remain in, or are of and belonging to the country concerned, and are the outcome of the special conditions of service within its

CHAPTER IV.

CAUSES LEADING TO CHANGE IN MILITARY SYSTEM.

AFTER the Crimean and Indian Mutiny campaigns, a succession of events combined to excite in this country public interest in military concerns, to keep alive the sense of weakness inspired by our Crimean experience, and to point the way to a new order of things.

With all our desire to avoid being compromised by the course of European politics, the shadow of a war-cloud rising over the Continent never fails to be projected over England, rousing her from lethargy, sometimes giving rise to panic, but under more favourable circumstances occasioning a healthy searching of heart and a fruitful examination of her position. Of this, frequent experience has been had during the last half-century. In 1841 the weakness of Turkey as shown in Mehemet Ali's invasion of Syria, and the consequent action of M. Thiers threatening war, inspired a genuine alarm. In the succeeding years the attitude taken by the Prince de Joinville and other "young and inflamed spirits of France after 30 years of peace showing a strong propensity for war,"¹ was followed in 1847 by the remarkable letter of the Duke of Wellington,² in which he denounced our defensive weakness. A moderate augmentation of the army ensued by which 8,000 men were added, and the troops of horse artillery were given four, and later six, guns, instead of the two to which they had been reduced in 1819. The convulsion of Europe in 1848-49 led to the

¹ Paper by Sir J. Burgoyne, 1846. See "Military Opinions," chap. i., p. 23.

² This "famous letter," a last service rendered in his 77th year by the great Duke to his country, was republished in "Life and Letters of Sir J. Burgoyne," vol. i., p. 444.

permanent strengthening of our military position by the regeneration of the militia force in 1852.

Later, in 1858, a plot, which was hatched in England, threatening the life of the Emperor Napoleon III., led the more fervid spirits in the French army to demand energetic reprisals. This action threatening to bring an enemy to our doors in spite of the friendly inclinations of the French Emperor, was answered first, by the re-creation, in 1859, of the volunteer force, which has since grown and developed in such a degree as to make it the third, if not the second, line in our land defence; and secondly, by the appropriation, in 1860, of a loan of seven and a half millions for the improvement of our coast defences, and notably for the fortifications of Portsmouth and Plymouth. A measure for this very purpose had been put forward in 1786¹ by Mr. Pitt, but was thrown out in spite of his protests; a similar proposal, now again urged by an energetic and popular minister, Lord Palmerston, had the full sympathy of the Queen and the Prince Consort, and, being favoured by circumstances, was carried. X

The French campaign in Italy, in 1859, afforded no new lessons of importance, but the Prussian concentration on the Rhine in the same year, with its shortcomings, and the modifications introduced in consequence into the Prussian army awoke attention.

In 1861 the great civil war broke out in the United States of America and lasted four years. Perhaps it was owing to there being so much that was new or not thoroughly understood, in the constitution of the forces engaged, and in the character of the country in which they operated, that the lessons of this war did not at once gain due appreciation on this side of the Atlantic, though such a war among people of our own race deeply moved this country.

As to the positive results of this contest, it was here that, on the sea we first saw the effect of ironclad ships,² and on

¹ Clode, vol. i., p. 224.

² Floating ironclad batteries had been employed by the French in the Crimean war, and battle-ships of the "Warrior" and "La Gloire" class were laid down in 1858. X

shore gained a fuller knowledge of the power of heavy rifled guns in siege operations: and a great impulse was thus given to the development of our *matériel*. No doubt the American war marks the commencement of the long era of costly trials of guns *versus* armour plates. It may also be noticed that, at the moment of its outbreak, the study of the art of war had been seriously recommenced in England. This study had found its appropriate home at the Staff College, which was instituted in 1858,¹ and it can readily be understood that the spectacle of such a war, with its strategy as unfolded day by day, was well calculated to give a vital reality to these studies.

Following on the American war, in 1864 the Schleswig-Holstein war gave the Prussian army, not yet entirely reformed since 1859, the opportunity of testing its worth on the battle-fields of Denmark. It was here that the needle gun made itself heard and felt, and a distinctly short service army, for the first time, gave ample proofs of its prowess. The details of the Prussian organization were perhaps not much studied, popularly, at the time, but it was at least well understood that the Prussian "young soldiers" had done everything required of them, and that moreover in a rigorous winter campaign. As a matter of fact, when compared with their subsequent wars, the Prussians fought that of 1864 with an abnormal proportion of young men; for they took the field with a force made up in the proportion of three years' quotas of young soldiers to two years' quotas of reservists; the normal state of things being that the three years' young soldiers are balanced by four years' quotas of reserve men. In effect, the Schleswig-Holstein war gave rise in England to a somewhat painful feeling of soreness and weakness. Proposals to interfere in the struggle were followed by inaction, and in consequence a sense of dissatisfaction affected the national temper and was not readily forgotten.

¹ The Staff College was developed from the old First or Senior Department of the Royal Military College, which, between 1799 and 1858, turned out more than 700 officers, many of whom performed distinguished service in various parts of the Empire. See chap. xxv., p. 415.

In 1866 the success of the Prussian army in the short Seven Weeks' war startled and electrified Europe. The chief factor in this success was felt to be the breech-loading rifle with which the Prussian infantry was armed, and every country now hastened to supply itself with such a weapon. This it was easy enough to do.

But it was not only the use of the breech-loader which caused the whole civilized world to have its attention absorbed in military affairs to a degree hitherto unknown in history. The rapidity of the mobilization of the Prussian army, its completeness in practical detail, the force and deadly precision of its blows, crowned with such speedy and brilliant success at Sadowa, brought home for the first time the conviction that it was possible for a nation to have an army numerically small on the peace establishment, yet capable of expansion at the shortest notice to many times that strength. It was then realized that, in the wars of the future, the decisive blow was to be expected at an unprecedentedly early moment, that campaigns would be short, and that it behoved every country exposed to attack to look to its readiness for putting its whole defensive force into the field from the very outset.

The system under which the Prussian army on its peace footing was made up to the war complement, complete in every particular by the incorporation of its reserves (so-called, but in reality an integral part of the army), was now carefully studied, and with all the greater encouragement from its being well known that Prussia was a poor country, bound to a rigid economy. Here then, it was felt, was a method which might in some way be imitated in a country like ours, where, however ample the means of meeting the cost, no project for augmenting the army, which would materially increase the national expenditure, would have a chance of acceptance.

Though appealing less to the public mind, the new tactics, as necessitated by the introduction of the breech-loading rifle, offered no less interest than the subject of army organiza-

tion. Whilst newspaper correspondents had well done their duty in sending home graphic accounts of the campaign, a new military literature appeared in Germany in the shape of short readable pamphlets and light narratives. When done into English by our own officers these were eagerly and extensively read, and proved an effective incentive to the passion, almost amounting to enthusiasm, with which the military world sought to realize the modern conditions of warfare. It was evident that a new era had dawned: our officers had little difficulty in accepting a development of fire tactics which was fully in accord with the principle our armies had long observed of using line tactics for the sake of their fire effect, rather than the column and bayonet attack. Met by the breech-loader fired rapidly from the hip, the old *Stosstaktik*, or bayonet assault, however impetuous, was now seen to be doubly doomed to failure.

Before 1866 it had been rather the fashion to look to France for all that was to be learnt in military science, but it was now realized that once again Prussia had definitely taken the lead. Not least among the means employed by Prussia, and to which so much of her success is due, was the custom of "annual manœuvres." It was soon learnt that according to this "*alte preussische Erziehungs-Methode*," as her officers affectionately termed it, every fraction of the army had each year several days' marching and manœuvring over the open country. This mimic war was now followed with much interest by such of our officers as had leave and the means to witness it.

About this time, in 1868, a minor war of our own in Abyssinia gave a not insensible stimulus to the pride with which the country ever regards the army when it has need of it. Its own pride of power, too, was flattered by the praise accorded by foreign spectators of the campaign to the conduct of the expedition, which was held to give a striking proof of England's ability to employ her military force with effect in regions however remote and under physical conditions however novel and difficult.

Less than three years later came the startling outburst of the Franco-German war of 1870-1.

So far an endeavour has been made to show how events, notably those of the previous ten years, had led on and trained the public and the professional mind to take interest in and understand the necessity of military preparation, as well as to study the means by which this state of preparation is to be reached. It is not too much to say that by 1870, England had been schooled to interest herself in military affairs to a degree unattained at any previous time since the beginning of the century, if indeed ever. The Franco-German war found the British public fairly in a position to follow all its phases with critical appreciation and the keenest interest.

As the war progressed, the overwhelming results of the self-deception of the French in over-estimating their own power, and undervaluing that of their enemy, took a strong hold on the popular imagination. Early in 1871 the Republican government, which had succeeded that of Napoleon III., determined to reveal to the world how France had been misled, published, among other documents, the very remarkable reports of the late French military attaché at Berlin, Baron Stoffel, who for three years had warned his government of the wrath to come—in vain. In the language of the editor's preface to the publication, these reports "*jettent une éclatante lumière sur la cause de nos désastres.*"

It is hardly necessary to dwell here on the events of the campaigns of 1870-1. It will be sufficient to say that what had been done by Prussia "in the green tree" in 1866, was renewed in 1870 "in the dry," with a ten-fold vigour and efficacy. The artillery armament, incomplete at the time of the war with Austria, had been perfected; all ranks now brought experience, as well as study and good will, to bear on the performance of their duties; above all, the whole power of Germany had been made available to work, on a like system and in the common cause, with Prussia, and the results were in proportion to the means.

The country had thus before it the most patent evidence of the consequences of military inefficiency, and the government had the moral pointed out to it in the denunciation by France, through the publication of the papers referred to, of those who, having been warned, had neglected that warning. At the same time it possessed the consciousness that the nation was alive to its interests in the question of military preparation.

Aroused as to its responsibility and awakened as to its needs, the government now undertook to introduce into England what we have elsewhere termed the "modern system," and entered generally on a course of military activity, which was vouched for in many ways, not the least important of which was the institution of the annual manœuvres held in 1871, and in several succeeding years.

CHAPTER V.

THE COMMENCEMENT OF TRANSITION.

FROM 1859, the end of the Indian Mutiny campaign, until 1871, the close of the Franco-German war, is the period which may well be taken as that of the commencement of transition from the old to the new order. It was from the outset marked by successive attempts to form an army of reserve; by other measures for keeping up the army, which revealed the uneasiness of ministers as to its condition; and by a general desire to see it placed on a more secure basis; but, as referred to in the preceding chapter, it was not until 1866 that the lessons of the Prussian organization caused reform to be taken in hand with decisive results.

It has been stated, p. 24, that the close of the long war in 1815 left us without any reserve¹ at all; only the permanent staff of the militia were retained, the men were not enrolled.

The first move towards providing a reserve to the army, other than the militia, was made in 1843, when the Crown was authorized to enrol 10,000 pensioners, staff officers of pensioners being appointed to pay and command them. But the object of this enrolment was to have a force to act in aid of the civil power, which, at that time, had no rural police at its back; and the Crown was entitled to use only the voluntary services of the enrolled pensioners in the event of war. In 1859, a reserve force was instituted by Mr. Sidney Herbert. The Crown was permitted to engage men of at least five years' service to the number of 20,000, who were to have a bounty of £4 annually, and in war were to serve

¹ Militia and volunteers were formerly styled the "Reserve Forces." This term is now only applied to the reserves proper of the regular army.

as regular soldiers within the United Kingdom; they were to be entitled to a pension at 21 or 24 years' service, reckoning two years in the reserve as one year for pension. In 1867, under the "Reserve Force Act" of that year, the two above-mentioned forces were together classed as the "Second Class reserve;" and a "First Class reserve" was established, which was to consist of 20,000 men who had not completed their first term of service in the army. These latter received the annuity and reversionary pension as in 1859, but were to be available in war time to serve abroad as well as at home.

The result of these measures, up to December 1868, was a very poor one. There were then 13,068 enrolled pensioners; besides 2,847 of the reserve of 1859, and 2,033 of the "First Class reserve" of 1867. But a further Act of 1867, called the "Militia Reserve Act," was more fruitful and has survived. It enables the Crown to make an engagement with a proportion of militiamen in every corps to serve as regular soldiers in the army in case of emergency.

The "Reserve Force Act" of 1867 was prepared after it had been referred by General Peel, the then Secretary of State, to a Committee presided over by H.R.H. the Duke of Cambridge.¹ The Committee was instructed to advise on the formation of an army reserve on certain lines. It recommended the forming a reserve by granting unlimited furloughs to soldiers coming home from abroad with such regiments as had an excess over the numbers on the home establishment, and it also pointed out, after reviewing the numbers that would be required to complete the regiments at home and abroad to a war footing, that "a reserve should be sufficient to fill up to a general service footing, at least all the corps serving at home." These two recommendations really foreshadowed the method and system subsequently adopted. At the time here spoken of, 1867, it was the invariable rule to fix the number up to which a reserve might be maintained (which as we have seen, was 20,000 for the

¹ Army Reserve Committee, Jan. 1867.

First Class army reserve), apparently on the principle, not only of controlling expenditure, but also of respecting the well-known parliamentary prejudice against a standing army. Adherence to this latter principle was perhaps overstrained; for already in 1852, in the debate on the Militia Bill, Mr. Sidney Herbert had declared there was no prejudice against a standing army—"that time had gone by."¹

In 1867 a new "Army Enlistment Act" was also passed, framed after the advice had been taken of the Royal Commission on recruiting of 1866, the second,² he it noted, which had been assembled in five years, in consequence of the failure in recruiting under the old system.³ The first point to which the attention of this Commission was directed was the deficiency of recruits. The remainder of the "reference" was very comprehensive, embracing suggestions for the localization of regiments, the retention of old soldiers in the ranks, the formation of a reserve, and the adoption of general service enlistment. The Commission declared the then existing Reserve Act of 1859 a failure, but had no plan to recommend in lieu of it. It was not in favour of localization, but suggested the improvement of local connection for the recruiting of regiments; it declared that a return to long service was impossible, and that the alarm of losing men by the operation of short service was not justified. It however increased the term of first engagement from ten years to twelve, and suggested strong measures for inducing soldiers to re-engage for a second period; it recommended that enlistment should

¹ Hansard's Debates, vol. 120, p. 1165.

² The Royal Commission of 1861 had recommended that recruiting, notably in the favourable season, the winter, should never be suspended even though the army should be somewhat in excess of its numbers. This valuable suggestion, though accepted in principle, has never been acted upon. It also laid a foundation, by its recommendation that the strength and energy of recruits should not be overtasked, for our present humane system, as practised at the depôts, of breaking the recruit gradually to the stricter discipline of military life.

³ The Report of the Royal Commission of 1861, p. iii., shows that the additional 65,000 men sanctioned for the army in 1857 had not yet been raised in spite of reduction of the standard, &c. The "reference" to the Royal Commission of 1866 mentions the failure in recruiting during the two years 1864-66.

be as far as possible for general service as distinguished from the old rule which recognized the innate disposition of a recruit to choose his regiment; and it also discouraged the prolonged concentration of troops in large camps. These recommendations seem to be somewhat contradictory; their enumeration now will serve to show how very unsettled were the opinions of the time, and how far we were from the adoption of any guiding line of policy in military legislation.

To this Royal Commission the army owes the institution of an Inspector-General of recruiting, with his staff—an essential provision in the system—as experience has shown. The Royal Commission, though appointed prior to the war of 1866, sat until after its close, and the lessons of this war were put on record in its report in emphatic language of admonition.¹ Recent events had shown, it said, that we could not rely on having much time for mobilization for war, and “woe to that country which is unprepared to defend itself against any contingency that may arise or combination that may be formed against it. . . . We must look more to our army. We think its present strength is barely sufficient for a period of peace, and the question is how we can most readily and speedily increase it, through the means of a reserve force consisting of men who have already received their training in its ranks. . . .” The Commission was not prepared with a plan to be “relied on to secure a large army of reserve,” but, having previously declared that “the first duty of those who preside over the administration of the army was to look to its constitution” it may be concluded that it consciously left this duty to the Government.

This admonition was the legacy to which Mr. Cardwell succeeded in Dec. 1868 as Secretary of State for War, which office he held for over five years, a duration of power only equalled by that of Mr. Stanhope, 1887 to 1892. The unsettled character of army management prior to 1868 may

¹ Report of Royal Commission on Recruiting, 31st Oct., 1866.

have been due, in part, to the frequent changes in the office of Secretary of State for War since its institution in 1855. Lord Panmure held the post three years; Mr. Sidney Herbert two; and in three cases the term did not reach one year. In fact no uniform policy had governed our military legislation prior to this date, 1868; it had indeed been characterized by much vacillation of purpose. It will be as well perhaps to explain this more in detail.

As has been noticed, p. 22, the modified system of short service introduced in 1806 by Mr. Windham—the outcome of many attempts to lighten the burden of military service and to popularize it—was acted on, although but partially, until 1829; it was then abolished by circular of the Adjutant-General in favour of life engagement, which had always existed side by side with it as an alternative.¹

But it appears evident that under a voluntary system of enlistment, men will surely desire to “see their way” when they engage themselves, and it is only reasonable to expect that a defined engagement as to regiment, area of service, and duration of obligation will be more acceptable than a life engagement for general service, and this expectation has been abundantly realized. When there has been pressure for men (as in the case of the Crimean war) short defined terms of engagement have been offered; but pressure once relaxed, reaction has set in, other influences have asserted themselves, and the teachings of past experience have been ignored. And this reaction has been repeated. The life term adopted exclusively in 1829, under the easy conditions of the requirements of the period,² gave way in 1846, when

¹ “Clode, writing in 1869, says, “Unless in emergencies, short enlistments must be distasteful to those who are responsible for training and educating the soldier in military exercises. In time of peace to have the constant work of instruction in hand instead of having the ranks filled with experienced soldiers, must make no slight difference to the commissioned and non-commissioned officers of the regiment, and this temptation requires to be constantly kept in check both as regards the militia and the regular army.” Vol. ii., p. 31.

² In 1829 only 8,626 recruits were raised; the average for five years from 1825 was 12,000.

it was decided to augment the army by 8,000 men, and in 1847 a ten years' engagement was adopted. The merits of this shorter term were very well recognized in many quarters in the service because it enabled commanding officers to rid themselves, automatically as it were, of the less desirable characters at the end of their ten years' term; but in 1867 this term was raised to a uniform twelve years for all branches, and re-engagements for nine years in order to complete twenty-one for pension were directly encouraged.¹ This had the result that from the 30th June 1867 to 31st December 1868, 40,998 men re-engaged with claim to pension, entailing an enormous cost, and this, although "no doubt the expense of an army constituted of re-engaged men is vastly in excess of an army of recruits, and doubts appear to be entertained whether, as a rule, it is more or, indeed, as effective as an army of younger men."²

Again, on the question of area of service, that is whether enlistment should be for a particular corps or for the army at large, or a branch of it, there have been similar reactions. General service was introduced in 1783, when recruiting was undertaken by the administration instead of by the regiments, but, on account of its extreme unpopularity, was discontinued in 1816. The reasons for this unpopularity are inherent in human nature. Lord Palmerston stated them very clearly in 1828, after many years' experience as Secretary at War.³

"I believe," he said, "there is a great disinclination on the part of the lower orders to enlist for general service; they like to know that they are to be in a certain regiment, connected, perhaps, with their own county, and their own friends, and with officers who have established a connection with that district. There is a preference frequently on the part of the people for one regiment as compared with another, and I should think there would be found a great disinclination in men to enlist for general service, and to be liable to be drafted and sent to any corps or station."

Nevertheless, general service enlistments were so strongly

¹ The artillery and cavalry had had a twelve years' term before.

² Clode, vol. ii., p. 31.

³ Evidence before the Finance Committee, 1828, pp. 189, 163. Clode, vol. ii., p. 22.

insisted on by the military witnesses before the Royal Commission of 1866, "in probable forgetfulness or possible disregard of previous experience in this matter"¹ as to be again sanctioned by Parliament in 1867.²

The minister who held office during the eventful period 1868-74—Mr. Cardwell—who was destined to apply the "modern system" to the British army, inherited, as we have seen, an onerous responsibility. The failure of recruiting which led to the Royal Commission of 1866, had not been remedied, and the reserve, though declared to be urgently wanted, was not being provided.

The absence of progress in these and other important matters was recognized to be due to a want of proper organization in the "conduct of business in the army department." Consequently the minister's first step was to put his house in order. In 1869 a committee under Lord Northbrook was assembled, whose recommendations in the following year, were adopted *in extenso*. As a result the administration of the army by the military department as to its discipline, organization, and distribution, was strengthened in an important degree by being made to include that of the then so-called reserve forces—viz., the Militia, Yeomanry, and Volunteers, as well as of the Reserve proper, while its responsibility to the Secretary of State was recognized and its business expedited³ by being brought under one roof with the War Office, which was thenceforward worked as a whole in three great departments. These were—(1) Military, (2) Control or Supply, (3) Financial.

Another measure which in itself and by its conse-

¹ Clode, vol. ii., p. 23.

² It is true that enlistments are now for "general service," when not for a particular corps, but it is not encouraged; on the contrary, the local connection of regiments with counties is fostered, and the sting is taken out of "general service" by a proviso that men so enlisted are at once appointed to a corps, and cannot be transferred therefrom unless within three months of the date of appointment, or under special circumstances specified in the Act.

³ As an example of the improved state of affairs, it may be mentioned that in 1872 official correspondence was found to have been reduced from 1500 to 200 letters daily.

quences was of very great importance in clearing the ground for the future working of the army, although not decreed until 1871, may conveniently be referred to here—viz., the “abolition of purchase;” in other words, of the system up to that time governing, practically, the first commissions of officers, their promotion, and retirement. This system was operative in the cavalry and infantry, which constitute the mass of the army, though not in the artillery and engineers. In alluding to this measure it will suffice to say that a system, which, bringing money considerations to bear on the question of obtaining distinction and preferment in a profession of honour, had at the best an ill savour, broke down at the instance of some of our best and most trusted officers. As Mr. Cardwell said in the House of Commons, it was found that the army was “in pledge” to the officers. The selection, or at least sifting out, of officers for higher regimental command—an imperious necessity—was impeded at every turn by the vested right of money sunk in the regulation (and worse still, in the over-regulation) prices of commissions in expectation of its return. A royal warrant put an end to the system.

It will prove instructive to note here, though at the cost of digression, the process of our legislation. The abolition of purchase in 1871 left a *tabula rasa* as to retirement; the Royal Commission of 1876 (Lord Penzance’s) fixed the ages for compulsory retirement; and finally, in 1881, the proportion in which the several ranks, from lieutenant to lieutenant-colonel, should be maintained was laid down by Mr. Childers, whereby it became possible to act on the principles prescribed by Lord Penzance.

Mr. Childers’ scheme was devised to avoid the compulsory retirement of officers in excessive numbers; promotion was to be brought within reach before the limit of age was attained; to effect this it was necessary for the prosperity of the service that the proportion of ranks within the cadre for promotion should be fixed on a plan constructed on mathematical

rules.¹ The great desideratum and difficulty in peace time has ever been to find some means for enabling officers to attain to the higher grades reasonably early in life. Mr. Cardwell had effected this in 1872, as far as the artillery and engineers were concerned, by giving major's rank to all first captains in those corps. Then, in 1881, there followed, in the line, an increase in the number of field officers and a decrease in that of lieutenants.² From that time whenever it has been proposed to increase the number of subalterns in a corps—and the temptation to this is often strong—it has been understood that an alteration of the due proportion in that direction brings us back to the evil of slow promotion, if not to stagnation, under which the army suffered for years, and from which it was relieved with so much difficulty.

While in 1869–70 the reforms within the War Office were in progress, an important policy initiated in 1861 was actively persevered with,—viz., the reduction of colonial garrisons. In March, 1870, Mr. Cardwell was able to inform Parliament that besides the disbandment of sundry colonial corps, such as the Cape mounted rifles and the Canadian rifles, which had hitherto been maintained by the Imperial government, he had been able to reduce the force in the colonies from 49,650 combatants to 23,941, and to raise the cadres serving at home as follows:—

Batteries, Royal Artillery, from 97, in 1868–69, to 105 in 1870–71.

Cavalry Regiments from 16, in 1868–69, to 19 in 1870–71.

Battalions of Infantry „ 46 „ „ 68 „ „

A disproportion which had formerly existed between the number of cadres at home and abroad was thus effectually remedied, for it was decided that no British corps proper should

¹ “If nothing had been done, we should have had up and down the country 3,000 to 4,500 captains ejected from the army.” (Speech by Mr. Childers, 3rd March, 1881, *Hansard*, vol. 259, p. 208.)

² Mr. Cardwell attacked this subject on 3rd March, 1870, when in strong terms he stigmatized the bad policy and deteriorating effect of keeping young officers for many years in the subaltern's rank without responsible duties.

be reduced. By preserving the cadres, the hardships and inconveniences which would have been entailed by a general reduction were avoided and at the same time the means for rapid expansion on emergency were retained. This procedure was fruitful in its results, as will be seen later when the reorganization at home is dealt with. Already at this time Mr. Cardwell stated his belief in the principle "that when a regiment consists of two battalions one should remain at home while the other goes abroad."¹

On the same occasion Mr. Cardwell announced that the financial difficulties of India had compelled a revision of the system on which the regiments in India were officered and organized, and on which the home charges for the provision of the garrison in India were based. The inconvenience entailed on relief by having 10 companies to a battalion at home and 12 in India was rectified by equalizing the number of companies; and the system of *depôt* battalions at home in which men from different regiments were congregated, away from the control of their proper commanding officers, and consisting of a number of inefficient men maintained at the charge of the Indian government, having long been objected to, its abolition was decreed as a "first necessity."

But the chief interest of this speech of Mr. Cardwell's lay in his disclosure of his Enlistment Act of 1870 which introduced the present short service system, and which was destined to provide an effective reserve.²

At this moment, owing to a reduction of the total strength being in progress, not many recruits were needed, the standard was high (5 feet 8 inches), and more men came forward than could be accepted; the time was a favourable one for testing a new system; and a convincing proof was given that, on the British method of raising soldiers, recruits were not kidnapped to serve, for they were now sent from

¹ Mr. Cardwell, 3rd March, 1870.

² The introduction of the double battalion system had been projected, and proposed to the India Office in a letter, before the Enlistment Act of 1870 was introduced. See Militia Committee, 1876, p. 3, Mr. Knox's evidence.

any part of the country to join their regiments without escort.¹

The essence of this important Act, which is in effect the basis of our present law of 1881, is that in the "species of contract,"² which is entered into between the Sovereign and the soldier, and which, under the ordinary principles of law, cannot be altered without the consent of both parties, the intending recruit is dealt with in a spirit of the greatest latitude so as to accommodate the terms of his engagement as far as possible to the special circumstances of his individual case. By its provisions "a recruit is not to engage for more than 12 years, and may engage to serve the whole time with the colours, or part of the time with the colours and part in the army reserve"; at the same time "enlistment for a term less than 12 years would be legal, and any part of such time might be for service in the reserve."³ Thus a man may be enlisted for three years with the colours and nine in the reserve, or for seven and five respectively, according to whatever arrangements are made from time to time, with the sanction of the Secretary of State, to suit the requirements of particular branches of the army or the exigencies of the service.

In explaining his views as to the operation of the Act, Mr. Cardwell said,⁴ in answer to objectors who held that intending recruits mostly wished to enter the army with the main object of getting a pension—"You and I are speaking of different persons, you of him who now enters, I of him who might enter the army, whom we wish to join it, of the young man who is reluctant to spend all his life away, who may wish to contract marriage, but who would give a good deal for the advantage of training for a few years. There must be inducements to that class of man to enter the army, for

¹ It was in the following year 1871 that the practice of marking men on their bodies with a D or BC for desertion or bad conduct was finally given up.

² Military Law, chap. x., para. 18.

³ *Ibid.*, para. 2.

⁴ 3rd March, 1870.

they do not enter it now." Of the total of 12 years he thought that six might be with the "standards." In regiments likely to remain at home or, say, just returned home, the period might be further reduced; he saw no difficulty in reducing it to three years. As to the reserves, he proposed that they should have the same sort of training as volunteers, that is by drills in the evening. "We may expect to see many young men passing through the army, learning trades in it, and afterwards returning to civil life to be ornaments and advantages to those around them, and at the same time to be ready to contribute to the defence of the country in case of emergency."

As regards the means of making the most of the new methods proposed Mr. Cardwell made it clear that the existing territorial divisions were chaotic and that a remedy was imperative. "Reserve districts, pensioner districts, recruiting districts, were not conterminous with each other or with the divisions (military districts) of the general officers." It was apparent that the battalions at home were of necessity placed where there were barracks, and the depôts of battalions abroad the same; so that however much it was desired to effect an improvement in their local connections for recruiting purposes, the existing plan of quartering lent no aid. The militia too, soon to be brought under the Commander-in-Chief,¹ were distributed about the country in barracks provided by the counties without regard to any plan; their staff did not aid recruiting, and except during the training had nothing to do beyond the custody of their equipments, and passed the remainder of the year in idleness. The "first step," said Mr. Cardwell, "was to unite all under one government," and this would result from the measures he proposed, "to weld and consolidate your whole system of regulars and reserves."²

¹ They were actually so transferred on 31st March, 1872.

² Of the correctness in the main of Mr. Cardwell's estimate of the results to be anticipated from the Enlistment Act of 1870 there can be no question; the returns annually presented to Parliament show how the army is now composed.

So far the measures had been taken to provide men for the purpose (i) of filling the ranks of the peace establishment, (ii) of keeping up a reserve of men in the prime of life ready to complete that establishment to the war strength.

In the next year, on 16th February, 1871, the minister further explained his policy as being

"To fuse together as we can the regular and reserve forces . . . to brigade them together . . . to unite all the voluntary forces of the country into one defensive army with power to supplement by compulsion in case of emergency; all to be under the general officers commanding in the districts, subordinate to one Commander-in-Chief who will act with the approval of the Secretary of State . . . to lay the firm foundation of a defensive force which may be a perfect security to the country not merely against danger but to that which is scarcely less intolerable to the spirit and independence of Englishmen—the perpetually recurring apprehension of danger."¹

Finally, in the following year (16th February, 1872), there was laid on the table of the House a memorandum, in which H.R.H. the Field Marshal Commanding-in-Chief laid down the plan on which the organization of the land forces should be effected, together with the report of a committee² which had elaborated the details involved. This

The table of "terms of engagement" 1st January, 1892, shows long service men, 1st period ..	Total
Re-engaged men	14,392
Short service men, original engagement	12,533
" " who have extended their original engagement	157,762
Not reported	17,381
	1,095
Grand total	203,163

Also a return furnished in the report of the Inspector-General of recruiting for 1892 gives the following important table showing the number of infantry soldiers serving in territorial regiments who were born in the regimental district, viz.—

1st January, 1883 ..	24,247	1st January, 1889 ..	49,665
" 1884 ..	32,376	" 1890 ..	51,131
" 1885 ..	34,654	" 1891 ..	52,725
" 1886 ..	40,265	" 1892 ..	53,480
" 1887 ..	45,279	" 1893 ..	55,831
" 1888 ..	48,899		

¹ Hansard, vol. 204, p. 357.

² The "Localization Committee." It was presided over by Major-General P. L. Macdougall, who had had much recent experience in the organization of the Canadian militia; the members of the Committee were Col. W. A. Middleton, R.A., Colonel (now Lord) Wolseley; Lieut.-Col. C. B. Ewart, R.E., and Mr. Ralph Knox.

memorandum so clearly indicates the principles of the plan adopted, and (with the exception that the regiments then linked in brigades have since been merged in territorial regiments, and that the establishments in officers have been altered) so closely represents the system now in force, that it is reproduced here *in extenso*.

MEMORANDUM . .

BY HIS ROYAL HIGHNESS THE FIELD-MARSHAL COMMANDING-IN-CHIEF,
ON THE PROPOSAL OF THE SECRETARY OF STATE FOR WAR FOR THE
ORGANIZATION OF THE VARIOUS MILITARY LAND FORCES OF THE
COUNTRY.

WITH reference to the Secretary of State's proposal to form Local Depôts or Centres, as the mode of bringing about a closer connection between the Regular Army and the Reserve Forces with Militia and Volunteers, I think the following plan should be adopted :—

1. Double Battalion Regiments to be worked as one Corps, to be formed into three distinct bodies,—one Battalion abroad at whatever fixed establishment may be required, with 1 Lieutenant-Colonel, 2 Majors, 8 Captains, 16 Lieutenants and Sub-Lieutenants, 1 Adjutant, 1 Quartermaster, and 1 Paymaster; one Battalion for home service at a reduced home establishment, with 1 Lieutenant-Colonel, 2 Majors,¹ 8 Captains, 14 Lieutenants and Sub-Lieutenants, 1 Adjutant, 1 Quartermaster, 1 Paymaster. The Depôt Centre to be formed by two Companies from each of the two Battalions, with 1 Captain and 1 Subaltern to each Company.

2. The Local or Depôt Centre to be in charge of a Lieutenant-Colonel, assisted by a Substantive Major, 1 Quartermaster, 1 Paymaster.

Two Militia Regiments to be included in each such District, with the Volunteer Corps of the District, and the Army Reserve men and Pensioners making up the entire force of the Local Centre. The two Militia Adjutants and the permanent Militia Sergeants to do duty with the Depôt Centres, when their Regiments are not embodied or out for training.

Each Militia Regiment to have its Sergeant-Major, Quartermaster-Sergeant, and Orderly-Room Clerk as part of its fixed establishment of Non-Commissioned Officers.

The Depôt Companies to have one Colour and one Company-Sergeant at all times distinct from the Militia Sergeants.

3. All other Regiments² to be linked by Brigades of two and two, and to be in every respect organized as the Double Battalion Regiments as regards one Regiment at home, one abroad, and with a combined Depôt Centre as specified above.

4. (a.) The present number of Battalions of the Army, 141, to be main-

¹ One Major attached to Depôt Centre.

² At this date the regiments numbered 1 to 25 had two battalions each, the remainder one only.

tained as at present, and the Regiments linked to be continued as separate Corps for the Officers, and made to act as much as possible in mutual support. The Majors for the *Depôt Centres* to be taken from the Home Regiment or Battalion, and to take this duty in alternation by periods of two years.

4. (b.) All recruits to be raised and drilled both for the Line and the Militia at the *Depôt Centres*, and to be passed from these as rapidly as possible into the two Service Battalions or Militia Regiments, as the exigencies of the Service may require: but in cases of war and Militia embodiment these *Depôt Centres* to be the nuclei for the formation of a Local Reserve Battalion. The Reserve men in each District to be trained equally for a certain number of days in each year at these *Depôt Centres*.

The present accommodation to be thoroughly examined into and made available for the above purpose, and supplemented whenever necessary by additional accommodation.

5. The first Battalions for Foreign Service to be on an increased Establishment, and those to form the first *Corps d'Armée* for service abroad.

(Signed)

G.

His Royal Highness' memorandum heralded the advent of an era of order and system, in the place of one of continual change and characterized by an utter want of harmonious co-operation.

In his speech, 22nd February, 1872, Mr. Cardwell explained the measures proposed, and showed that the essential idea of his scheme was to connect two line battalions with each territorial district for recruiting purposes;¹ to associate therewith the two militia battalions and the volunteers of the locality; the whole to rest on a brigade *depôt* or centre which could be converted into a third battalion. One of the line battalions was to be abroad and the other at home. The militia, volunteers, and *depôt* of the district were to be under a colonel; the militia was to train as a rule at the headquarters of the territorial district, and be inspected by the colonel, who would act as "brigadier," and "commanding-in-chief" of the whole. It would thus be possible to give the auxiliary forces the benefit of a superior training, all forces would be effective, we should at last be working on a system, and a system was what we had never yet had.

¹ It was never intended to *locate* the battalions in the district: their localization affected recruiting not quartering.

The steps taken at the outset of army reorganization having now been described, a subsequent chapter will show the form which that organization has taken since ; but first it will be convenient to show the operation of the "modern system," in its present shape on the Continent. It must be remembered that it has been avowedly sought to adapt the Continental method to our own exigencies. It is consequently desirable to see clearly the points wherein that system is approached, and those wherein it is departed from, and to understand the justification for such departure.

But it is of interest to know that, so far as concerns local county connection, the intimate relation of the militia to the line, and the principle of supporting and maintaining one battalion abroad by means of another at home, our own experiences are a sufficient guide. The national records bear evidence as to what was the custom in this country, and it is remarkable how closely the present military system approaches to that initiated by Mr. Pitt. In the "Military Transactions" of Major-General J. W. Gordon, who was Secretary to H.R.H. the Duke of York when Commander-in-Chief, published in 1809, the measures adopted by Mr. Pitt in 1803 are spoken of in terms of the highest appreciation, both in the text of the book¹ and also in a letter from H.R.H. to the Minister of War, Mr. Windham.

In the War Office library there is a copy of the "Military Transactions" which bears evidence of having been consulted at that very part which contains the passage in the Duke of York's letter referred to, but the facts have long been lost sight of. Both the text and the passage in the letter are here given in full ; they will, on perusal, show the analogy between the army system now in operation and that conceived in 1803 by the genius of Mr. Pitt, and endorsed by the approval of a Commander-in-Chief of the experience of H.R.H. the Duke of York.

¹ In this book Major-General Gordon shows himself on other points an unsparing critic of the government.

Extract from the "Military Transactions," 1809, by Sir J. W. Gordon, Secretary to H.R.H. the Duke of York, Commander-in-Chief (Supplement, p. 3).

"In 1803 the 'Reserve Act' of Mr. Addington provided in a few months a force, as heretofore stated, of 45,492 men, which, though certainly effective nearly to the extent intended, was but a temporary expedient for the necessities of the moment, and the army, in the ensuing year, required not only a supply, but a permanent increase of force. To obtain this object, Mr. Pitt brought forward his Act for the providing a permanent additional force to the army, a measure which was undoubtedly calculated for the purpose intended by *connecting the army with the country*,¹ in placing the new levies under the command of those officers with whom they were afterwards to serve, and by previously regimenting them into battalions for home service, providing at once a second line of defence, a constant supply, and additional force to the battalions abroad, and effectually maintaining that connection between the army and the several counties, by which alone the force of this Empire can ever be fixed upon a solid and durable foundation."

"Such was the intended outline of this measure, but from the novelty and extent of the plan, the numerous faults in the details of execution and, above all, the strong opposition it met with from various political causes, the army received but a small increase to its numbers, and the measure was repealed after the death of Mr. Pitt, in the subsequent administration of 1806; having however fixed *its strongest and most efficient feature upon the army, by establishing second battalions to most of the regular regiments then abroad, and by which alone the 'Additional Forces Act' will ever be known and considered as the most beneficial to our permanent military establishment, and to the consequent security of the Empire, that this country has ever yet produced*¹ . . . (p. 6).

The plan that was adopted for this purpose was, to divide the whole of the United Kingdom into districts, each consisting of such a proportion of country as was required under the Act to furnish 8,000 men. To each of these districts one regiment of the line augmented for the purpose with a second battalion, at the establishment of 1,000 rank and file each, was allotted; and as the great latitude given by the Bill both in regard to the age and size of the men allowed to be enlisted² afforded much reason to apprehend that a great proportion of the numbers raised by the parishes (though within the letter of the Act, and therefore not to be rejected) would not be fit for active service, an additional battalion, under the name of Battalion of Reserve, was formed in each district, and appropriated for the reception of all the overplus men, together with those who, either from age or size, were not judged capable of active service.

This arrangement was carried into effect in Great Britain"

Reference to the above in a letter from H.R.H. the Commander-in-Chief

¹ The italics are in the original.

² Between 16 and 45 years of age, and as low as 5 feet 2 inches in height.

(the Duke of York) to the Rt. Hon. Wm. Windham, dated Horse Guards, 18th March, 1806. (See Military Transactions, Supplement, p. 65.)

" . . . As this plan was intended to be permanent, of which one of the great objects was avowedly to keep up the connection, as above stated, between the regular army and the several counties of the United Kingdoms it became necessary not to adhere to the usual mode of placing the men, when raised, into battalions generally, which would otherwise certainly have been the most economical way, and have required only a progressive increase of battalions and establishments, according to the success of the measure, but at once to attach second battalions (in proportion to the whole number of men to be raised by the Bill) to particular corps of the regular army, into which the men when raised by the respective counties were solely to be placed in the first instance, and from whence if they could be induced to extend their services generally, they could be removed to the first battalions, thereby making the second a nursery for the first, a system which has so far been crowned with success, as may be seen, not only by the actual strength of each of the first battalions of those corps, but by the number of men in the second battalions who are already enlisted for general¹ service, and who, from the complete state of their first battalions are not yet able to be placed in them. Sensible, therefore, of the success of this measure altogether, I cannot but regret the intention of giving it up, unless His Majesty's ministers have formed some other plan which they think will be equally productive."²

It is not necessary to rely alone on the above expressions of approval of the system instituted by Mr. Pitt; it might be said that they were enunciated at too early a moment after the events, and in the heat of controversy. The opinion of Lord Hardinge, who was a contemporary observer of the events both of the Peninsular and Crimean campaigns, may be referred to. It will be seen, by the extract printed below,³

¹ *General* in the sense of *unlimited*.

² It may be noted that the abolition of the "Additional Forces Act" was brought about by its unpopularity, not at all in respect of the organization it provided, but in that of the pressure it put on the parishes which had to find men or pay a heavy fine. (See Clode, vol. ii., pp. 52, 53.)

³ "When questioned concerning the recruits sent out to reinforce the army before Sebastopol, he gave the following explanation:—The necessity arose entirely from the fact that the peace establishment stood at so low a figure that after the first effort had been made to despatch a force of 25,000 men, no reserve of seasoned soldiers remained at home, and no means existed of supplying the waste of the army in the field except by sending out recruits. Comparing the condition of the army in the Crimea with that of the army in the Peninsula, he pointed out that, when Wellington commenced his campaign in 1808, a system of double battalions had been maintained for years, while the militia was in a state of high efficiency, having been embodied to resist invasion. . . ."

that he set the highest value on the system of double battalions in force during the earlier war.

“The root of the whole matter lay in the fact that we possessed no reserve, and no second battalions to feed the battalions in the field, as had been the case in former wars. The Government entered upon the war with too low an establishment, and the strain upon the different departments proved that they were unequal to the emergency.”—(Life of Lord Hardinge.)

CHAPTER VI.

THE MODERN SYSTEM IN EUROPE.

THE armies which existed throughout the continent prior to the French Revolution were essentially "mercenary" armies enlisted under royal authority to obey the behests of kings. They had in fact been the great agents by which the unity of nations had been created and maintained from the time when the feudal system broke down. Their first appearance in Europe dates from the time when the unscrupulous and most skilful diplomacy of Louis XI. succeeded in substituting for the feudal levies, which had become both for France and other powers a source of disintegration and not of strength, troops enlisted and paid by himself, and owing no allegiance to any one but the king. It was many years before the other rulers of Europe were able to imitate a system which in his hands had proved so effective for destroying the power of the great feudatories of the Crown.

In England the Wars of the Roses shattered the feudal nobility. The Tudors, strong as they were as national monarchs, had little need to adopt any system expressly directed against the strength of the great feudatories whose power had been already broken, and it was not till the time of Charles I. that the questions connected with the right of kings to maintain an army during peace time, came to be serious matters of domestic politics. The army of England in fact dates from the time of the Restoration, and was modelled by Monck from the experiences which he had learnt in war under Cromwell. From that time regiments were enlisted under the authority of the Crown, by the special permission of enabling Acts, which invariably recited the fact that it was unlawful for an army to be maintained in

peace time within these realms without the consent of parliament. The English system was a compromise between the old feudal system and that which owed its origin to Louis XI. For though the regiments were enlisted and paid under the authority of the Crown, that authority was usually delegated to some man of local influence who raised a regiment largely among his own dependents. In fact the so-called "Royal regiments" owed their title to the fact that they alone were enlisted immediately in the name of the Crown, the others such as the "Earl of Mar's," the "Duke of Norfolk's,"¹ &c., being enlisted under the authority of the Crown by their titular chiefs.²

In Germany the system of mercenary enlistment had been carried to a point so extreme that during the confusions of the Thirty Years' war, Wallenstein as the most potent creator of a mercenary army became a serious danger to the state; while Gustavus Adolphus, entering as a stranger with a small nucleus of his own Swedish troops, was able to raise in Germany itself armies so numerous, by paying them with the subsidies he exacted by their aid, that he could venture, whilst fighting with the Empire itself, to threaten to carry war at the same time into France when she offended him. The first rise of the Prussian Monarchy was based upon the success with which the father of Frederick the Great had applied this method; enlisting, as he did, into his army the finest recruits he could lay hands on from any part of the world.

At the time then when the French Revolution broke out, the idea of an army in all these countries was that it was a disciplined force created at the pleasure and subject to the personal control of the existing monarch. The very restrictions which in England were placed upon the maintenance of

¹ Became respectively the 21st and 22nd Foot, now the Royal Scots Fusiliers and the Cheshire regiments.

² In the old army lists this is shown in a quaint way. Thus we find two regiments in succession in the army list of 1740. "The late Lieut.-General Napier's regiment of horse" and "His Majesty's first regiment of carabiniers commanded by Lord Cathcart."

an army in peace time were all based on this assumption. In France, in Prussia, in the Empire of Germany, and in all the small states which had gradually developed out of the old feudatories and electors of the Empire, this was the case. The army was limited by the money which the ruler of the state could manage to procure for its enlistment and maintenance. Between it and the nation there was a great gulf fixed. The inhabitants of a country might to some extent recognize that in order to secure the national independence, or the greatness and dignity of the state, an army was a thing which it was desirable for the King to have, but it was always the King's army; the nation had in it neither part nor lot.

Into this condition of things as into so many other of the survivals of ancient time the French Revolution burst like a whirlwind. The enthusiasm which carried the peasants of France to the Revolutionary standards was not one in its earliest stages very effective for military purposes. That enthusiasm did not prevent them from running like hares at the first flash of an Austrian sabre, or the distant sound of a Prussian gun. But it did change the whole idea of the relation of armed bodies to the state. When old Dumouriez had succeeded in introducing some semblance of discipline into the ranks of the worthy peasants, in inspiring some terror into the miscreants and cut-throats who flocked from Paris to his standards, and had further by most skilful generalship given these levies a victory, which they had not deserved, over the imperial and royal soldiers of Germany and Prussia, he had, as Goethe foresaw, changed the whole condition of things in Europe. Though Dumouriez was himself sacrificed in securing the result, discipline and confidence in their own power as soldiers was from that time gradually infused into the revolutionary levies.

The national enthusiasm put into the hands of the first ruler of the nation who should appreciate his opportunities the power of creating armies on an altogether new system. Napoleon, the child of the Revolution, was able at his will

to call for annual contingents from the country, who were enlisted, not for pay, but because the representative of the national will chose that they should join the standards.

As Napoleon's empire extended over countries that were entirely devoid of French enthusiasm the character of his army gradually changed. More and more towards the end of his life it had come to resemble one of the old monarchical armies of Europe, in everything except in the facilities which the method of conscription gave him for raising soldiers. As his power diminished even these gradually failed him. The general resistance to the levies of conscription made his armies almost as much dependent upon pay, in the form of hope of plunder, as had been the armies of Wallenstein or Tilly.

Whilst the system of Napoleon was waning, another had come into existence on a scale so insignificant that little indicated that towards the end of our century it would be generally adopted throughout Europe. In nothing is the rise of Prussia more remarkable than in the fact that in almost every instance the growth of its power, at least since the time when Napoleon crushed it at Jena, has been the direct consequence of failure and disaster. The terms which were imposed by Napoleon upon Prussia when the peace of Tilsit left him free to dictate to her, were designed to leave her impotent for further action in Europe. Under the skilful hands of Stein, Scharnhorst, and Gneisenau,¹ they became the seed beds of all her future development.

The contingent which Prussia was allowed to keep up was only 42,000 men. But the miseries produced by the "Continental system" had aroused in Prussia a national feeling, of a different kind but quite as intense and strong as that which the revolutionary propaganda had some ten years earlier produced in France. It was possible to develop this national

¹ Of the three, Gneisenau's is the name best known in England because of the services which he as Blücher's chief of the staff rendered at Waterloo. But both of the others played most important parts, Stein as the great statesman who tackled the agrarian problem, Scharnhorst as the great military organizer.

feeling of Prussia by boldly sweeping away all remnants of the feudal system, in so far as they pressed hardly on the peasantry, and, by giving them an interest in the land, to remove all causes which tended to create any sympathy with the foreign aggressor. That done, appeal could be made to the people to pour themselves into the ranks of the army for the purpose of learning how to drive the oppressor from the soil.

With strong French garrisons holding Stettin, Custrin, Glogau, Thorn, and Dantzic, with Saxony a zealous ally of Napoleon's, the monarch would have had little power to coerce unwilling subjects into joining his armies. With the people as enthusiastically anxious as the king himself to expel the French, the only thing that was necessary was to get over the difficulty imposed on the military instruction of the people by the French treaty.

It was to effect that purpose that the now so famous "short-service system" was first introduced. By training the eager recruits for just such time as was enough to teach them their business as soldiers, by then sending them to their homes to await the happy hour when, for the deliverance of their country, they should be again called to the colours, by replacing them, as rapidly as vacancies could be created, by others as eager as themselves, an army was gradually trained under the very noses of the French, which was ready when the proper hour arrived to become the nucleus for the levies which the enthusiasm of all Germany poured into its ranks.

The strength and the weakness of such an army showed itself admirably in the campaigns of 1813-15, which ended in three successive overthrows of the power of Napoleon. The young, slightly-trained soldiers were admirable in *élan* for attack, for a sudden rush, but they did not possess the stamina and resisting power, the capacity for acting on the defensive, or, it must be added, the slowness and the dependence upon a thoroughly effective commissariat of the soldiers of Wellington. The "majesty with which the British soldier," in those days, at least, "fought," was

unknown to them ; but it was replaced by both an exceeding eagerness for the fight and a capacity for rapidly recovering their cohesion after the gravest disasters, which was the astonishment of those who had been accustomed to the traditions of the older armies. The army broken at Jena scattered into fragments ; the army broken at Ligny played its part at Waterloo forty hours afterwards.

After the fall of Napoleon both the system which he had left behind him in France and that which Stein, Scharnhorst, and Gneisenau had worked out in Germany fell into decay. Very much the same cause produced the result in both instances. In France the conscription under the restored Royalists, under the Citizen Monarchy of Louis Philippe, and under Napoleon III., was an essentially unpopular institution. The form of the instrument had been seized by the monarchs who replaced the Revolution, but the revolutionary enthusiasm which had made its original adoption possible, had disappeared. In order to fill up the army by a process of what was well called "compulsory enlistment," it was necessary to resort to a system of ballot, by which it was determined upon whom should fall the "unlucky" numbers which involved enrolment in the army. Exemptions of all kinds were permitted on grounds of class privilege and favour. Those who drew numbers which involved them in liability to the hated service could purchase from the refuse of society substitutes who were ready for a consideration to take their places for them. The gradual deterioration of the army which this corruption of the system of conscription induced was concealed from the eyes of Europe by the successes which attended the French army when contending against the yet more unsatisfactory armies of Russia in 1854-1855, and of Austria in 1859.

During the years which followed the peace, Prussia had more and more fallen into a condition of partly real and partly apparent decadence. On the whole the tradition of strict military duty had been preserved in the army, but the policy pursued by the rulers of the kingdom was at once

feeble and unpopular. In 1848 the outbreak of revolution throughout Europe accompanied by a poetic and democratic effort for a union of Germany, mainly directed against the little princelings of that divided population, brought things to a crisis. The King of Prussia allowed himself for a moment to play with the imperial crown that was offered him by the revolutionists. The statesmen of Austria, indignant at this attempted usurpation of her rights, marched in the following year to the borders of Prussia troops elated by the triumph of Radetzky in Italy and by the restoration of the power of Austria in Hungary by help of the Russian arms. In vain the Prussians endeavoured to develop their strength on the lines which had been laid by Scharnhorst and Gneisenau. The militia did not come in. The machinery for the mobilization of the army had fallen into decay. From sheer impotence, alike material and moral, the King of Prussia was obliged to submit to an ignominious treaty known as "The Political Capitulation of Olmutz," which completely restored the old constitution of the German Empire, and assured to the House of Austria its undoubted supremacy.

Ten years later when France had overthrown Austria on the plains of Lombardy, Prussia, alarmed by the progress of the French arms, desired to assemble her armies for the field. Once more the system absolutely collapsed. It is necessary to insist with extreme pressure on the significance of these points, because there is not a more popular, a more rampant, or a more mischievous fallacy than the notion that Prussia, resting tranquilly on the work which had been done for her half a century before by the men of the great war of liberation, advanced in triumph to the fields of Königgratz and Sedan. During the years which preceded the advent, first to the Regency and then to the Kingdom of Prussia, of him who was to be subsequently the first Emperor William, Prussia was universally regarded, to use the graphic, though, in its actual application, unfortunate, phrase of the French statesman, as "*une quantité négligeable*." In

the reforms which followed the accession of William to power, politics and army reorganization went hand in hand. The first symptom of the coming time was the announcement by William, in his speech from the throne, that he proposed to take up the subject of Schleswig-Holstein. That meant that he intended to assume the leadership in a cause dear to the hearts of all Germans, and that the military reforms which he announced were necessary to that end.

Those reforms, broadly stated, tended to convert the ill-disciplined militia and the small army, which were, in fact, the relics of the system of 1815, which had broken down in 1848 and 1859, into a greatly increased army with a strong reserve supported by a militia which had been thoroughly trained in its passage through the ranks. Under the system which existed up to 1859, about 40,000 recruits served for three years annually with their regiments, and then for two years in the reserve. Thus the standing army consisted of 120,000 men without, and about 200,000 with, the reserves, not allowing for waste. The consequence was that the first levy of the Landwehr was necessary in order to complete the army for the field. Consisting as it did of men from 25 to 32 years of age, who had for the most part married, and regularly settled down into civil life, this militia represented nearly half the strength of the army in the field. It was this that had proved so great a source of weakness in the attempted mobilizations of 1849 and 1859. Under the system inaugurated in 1859, somewhere about 60,000 men were called up each year, and instead of serving for only two years in the reserve, it was provided that they should so serve for four years, that is between the ages of 23 and 27.

Thus the army instead of numbering something under 200,000 men with its reserves, numbered, with them, 420,000. It was therefore possible to employ the Landwehr levies in fulfilling duties, most necessary for the army, for which they were admirably adapted. They could relieve the regular army of the charge of fortresses, the guardianship

of the lines of communication, and the like, and they could fill so many of the different offices which had hitherto tended to reduce the strength of the fighting ranks, that practically the army on the field of battle, would correspond much more closely with its paper estimate than had ever been the case before. It is of interest to note the characteristic features of this great reform, because in some respects it depended on opposite conditions to those which are supposed to be associated with the Prussian name. Though the length of service in the regular army was not increased, the proportion of recently trained men in the fighting army was very largely augmented. It was, in fact, a process by which those who had been too long away from the standards were eliminated from the ranks of the fighting army, and relegated to work more suited to their condition.

In principle each province of Prussia provides a corps ; each corps garrisons its own province, each regiment its own town. This part of the system has been considerably modified by the necessity for garrisoning Elsass-Lothringen since its annexation. Many of the new provincials have gained their training in distant districts, and not a few of them in the Prussian Guard.

In principle, then and now, the service was and is universal—that is to say, that as soon as a man arrives at 20 years of age he has to present himself to be medically examined for the army. Motives of economy determine the exact number of those who shall be taken each year. But no exemptions on the ground of personal favour, and no substitutes are permitted. There are no “unlucky” numbers. The physically strongest are taken. Those who are actually physically unfit for service in the army are rejected on that ground. Those who are not completely developed are put back for a time. Those who are not required to make up the necessary number are noted as forming what is known as the *Ersatz* reserve, and are liable to be called up at any moment to fill up vacancies caused by waste. Most of them undergo a certain amount of training. The only exemptions permitted are such as the

state in its own interest allows. Those who go to the cadet schools, to be trained as officers, naturally pass through a different curriculum.

Students at the university, and others who are able to show that they can qualify themselves for service more rapidly than the ordinary recruit, are permitted to serve as one-year volunteers, living out of barracks, but doing their ordinary drills, paying for themselves certain expenses which do not fall upon the recruit, but subjected to rigid tests as to their actual efficiency as soldiers by the time that they have completed their course. Those who wish to remain in the army as non-commissioned officers have considerable inducements to extend their service from the fact that all the many offices of the state, on the government railways, telegraphs, and in the bureaux are reserved for men who have thus served.

The moral distinction between this system and at least the later stages of the conscription, as it existed in France, is of a very marked character. Not to have served under the "universal" service system denotes a certain, at least physical, inferiority. The effect of this on the general view of army service, in the ranks and among the population at large, is one that grows as time ripens the system. Nowadays it is common to hear, in a railway carriage, a man who has not for some reason or other served addressed with a kind of pitying condolence, by his more fortunate brethren who have passed through the ranks: "Ah, you have not served!" in a tone that appears to imply "poor fellow, what was it then that was the matter with you." As it was recently graphically expressed by a distinguished Englishman: 'In this country we think consumption a terrible misfortune for any one, because of the suffering, the weakness, and the danger to life which it implies—in Germany the first thought is 'He is consumptive! He will not be able to serve.''' Women, thinking of a coming war, deplore the fact that they will have no relations in the army. On the whole it were well that these distinctions between "con-

scription" and "universal service" were better understood by many English writers for the press, who not unfrequently talk as if conscription were the form of service which now exists on the Continent and attribute to it all those conditions of "unlucky numbers" and the like, which belonged to a far distant past.

But important as this aspect of the question is, both in its directly warlike and in its social aspect, it was by no means the only respect in which the reforms of 1859, progressively improved down to our own day, tended to give a perfection to the Prussian, and ultimately to the German army, which made it the model of European imitation. In the first place the mere forms of the organization of the army have been most carefully thought out. Each corps contains rather less than 30,000 men. There are in it two divisions, each division consisting of two brigades of infantry, and a field division of artillery of 4 batteries each of 6 guns, a regiment of cavalry for the divisional service, one or two companies of pioneers and a sanitary¹ detachment. One of the divisions, in 1870, had an additional light battalion for general purposes. The corps in addition to the two divisions have one horse artillery division of two batteries, one field artillery division of four batteries, and a sanitary detachment. The 4 divisions or 14 batteries of the corps form an artillery regiment of the same number as the corps.

Now it is to be noted in this organization that the first great principle of it is that the progress of command upwards shall be by a comparatively small multiple, so as not to give to any one rank more to do than, with the delegated powers entrusted to subordinate commanders, may easily be done with efficiency in peace time as well as under ordinary circumstances in war, and even for the greater part of the day of battle. Thus the corps commander has his two divisions, each very complete in itself, and his corps troops, practically another unit, immediately in his own hands. The

¹ Literally "*Sanitäts-Abtheilung*," approximating to our bearer company.

division commander has his two infantry brigades, and his artillery division. The brigade commander has his two regiments. The regimental commander has his three battalions. The battalion commander has his four companies, and the company commander has his three "*Zugs*."

The next point is that whilst each of the arms has an organization of considerable numbers of its own, like the regiment of artillery of the corps, and may be brought together for the purposes of work of the arm, yet the association between the infantry and artillery, more especially, is exceedingly close, a special artillery division being attached to each division of infantry. This is perhaps a little more conspicuous as regards the cavalry during peace time than in war, because the whole of the cavalry, with the exception of 8 or in some cases 12 squadrons per corps, were in 1870 taken away from the corps and moved together in independent cavalry divisions. The habitual association however during peace time of the three arms in bodies constantly working together is an important element in the training of troops under modern conditions. Far more important is the practical working of the system in giving to each officer a definitely assigned limit of authority within which he works with entire freedom and complete responsibility, the result and not the method by which he arrives at it being as a rule the test of efficiency. The permanent organization and constant amalgamation into large bodies, makes it possible to decentralize to an extent which is impossible where an army is broken up into scattered morsels, as was for instance the case in England from the time of the great peace till just before the Crimean war. This has only since then been modified by the exceptional creation of large camps at a few special stations of which Aldershot is the chief.

Another element of the greatest importance in regard to the adaptation of the army for war consists in the completeness of the system by which, through the working of the "great general staff" in Berlin, all local requirements are

provided for the transport of the army by rail or road to any required destination. Here, too, the system of just so much work being done by the headquarters as is necessary to combine the movements of the corps, and to prevent their interfering with one another, while all local details that can be worked out on the spot are left to the corps commanders is carried to the greatest perfection.

In completing the army to war strength the fact that the number of regimental officers has to be augmented is taken into account. On the peace strength the number of officers is not more than sufficient for the duties, owing to various causes; one, and not the least patent, being that in Germany the class, of the condition and willing to serve as officers in peace time, is not relatively numerous. The military system of reserves is therefore adapted to provide, not only the rank and file, but also the officers necessary to complete the troops with the colours to war strength on mobilization. The chief source of supply, in the junior ranks, is from the one-year volunteers of whom mention has already been made. Those of this class who are willing and able to pass the officer's examination do so, and, on being duly recommended by the military (Landwehr) authorities of their district, are posted to regiments in sufficient numbers to enable all vacancies on the war establishment to be kept filled on paper, in anticipation of mobilization. As all this class, though serving but one year with the colours, are *wehrpflichtig*, or liable to service, for the same period as other men, they fulfil their obligations in this respect, by serving as officers at the periodical calling up of the reserves, and thus acquire proper experience of their duties as officers.

Besides the augmentation in officers and men, that in horses, and transport, is a prime feature in mobilization arrangements. The numbers of men outside the ranks of the regular army who have received a military training makes it possible to have a trained transport available for the work of the army in the field, and proportionate to its requirements. The importance of this can hardly

be overrated. As, however, many more horses are required for war purposes than it would be at all advisable to keep up in peace time, the full number necessary to supplement the wants of the army is registered, and when war breaks out and the word "mobilize" is telegraphed over the country, every horse and cart, as much as every reserve man, has its already assigned place for falling into the ranks. Depôts are immediately formed from the different regiments into which any incompletely trained recruits, any of the *Ersatz* men who have not undergone training, invalids, and other nondescript odds and ends, such as invariably exist in large numbers under such circumstances, are immediately drafted. The permanent cadres of the dépôt remain, generally speaking, constant, but the men undergoing training, or passing out of a condition of convalescence into one of health, are successively drafted off to supply the waste of war or to occupy places where their training may be carried on with equal efficacy while they serve to relieve the more experienced soldiers.

Whilst the other arms of the service have both a peace and war footing, the cavalry alone is kept on the war footing with a view to its being dispatched to the front at 24 hours' notice in the event of war. For the other arms the periods of mobilization would not exceed a week. It is believed that the components of an army corps would be ready to march or entrain on the sixth or seventh day of mobilization. The artillery might be expected, as they require to be augmented by such a large number of horses, to occupy a longer time in preparation than infantry, but, though the men of the latter might be sooner ready, they too require their regimental transport, and to get in the horses for it occupies perhaps as long a time as in the case of the artillery.

The success of Prussia in 1866 caused her system to be extended over North Germany in 1868. It was adopted by Austria in the same year with slight modifications, by South Germany on the creation of the Empire as a consequence of the war of 1870, by France with certain special modifications

of her own in 1872, and by Italy in 1871. So far as the general purposes of this chapter are concerned the differences of system, which are little more than matters of detail, and would require tabular statistics to make them intelligible, need not be dwelt upon.

Obviously, however, from what has been already stated a system in principle "universal" may admit of considerable differences in the numbers actually taken for the army. The extent to which all men are taken for the army depends in Germany on the number of men relegated to the *Ersatz* reserve. Under the system of 1859 the numbers with the colours were limited to one per cent. of the population. France, less restricted by considerations of economy, and burning to recover her lost position of pre-eminence, has, by a series of most severe measures, of which the most drastic was that of 1889, actually pushed the system to its logical conclusion, and has for several years taken into training all those who were fit for service and had arrived at the proper age. Never has any edict admitted of so few exemptions. Sons, the only support of widows, a class always hitherto exempt, now only so far gain advantage that they are allowed to go on furlough at the end of one year if they have shown themselves to be perfectly trained by the end of that time; otherwise they are liable to be retained for the full term. The great increase of numerical force which France is thus able to obtain has obliged the rulers of Germany to extend their own system. At the time that these pages go to press it is impossible to know what precise form the new system will take. That will depend on the modifications that may be introduced into the bill now being discussed in the Reichsrath. It will be sufficient, therefore, to say that the proposal involves the absorption into the regular army of the whole of the *Ersatz*, which will cease to exist if the scheme be carried out in its integrity. In order to ease the pressure upon the country the nominal length of service with the colours is to be reduced from three to two years. In practice now few recruits are kept for the

whole term of nominal service. The alteration in this respect is, therefore, less considerable than it might appear to be.

It is necessary to point out one peculiarity of the new system as compared with that of the past. In the days when an army began a war with just the troops who stood in its ranks in peace time, an addition of ten thousand men to its ranks represented precisely that addition to its strength for war five years afterwards, less the loss by waste which might have occurred in the interval.

Now on the contrary an addition of ten thousand men to the annual contingent taken for an army, means that five years hence the army, including its reserves, will have been increased by fifty thousand men, less waste in the interval. Under these circumstances the question of the date when an increase to the contingent is made becomes a matter of very great importance. France, having begun the great increase to the numbers of her contingent in 1889, has a start over Germany even if she begin her increase in 1893, which represents in 1893 a number of men nearly fourfold greater than the increase in the contingent of any one year. It is this continual rolling up of the strength of an army by the short service system which obliges any one of the competing powers to watch very anxiously and jealously lest it shall have been anticipated in point of date by a neighbouring state. The financial strain of an attempt to call to the colours all who are available is so enormous that there can be no doubt that French statesmen calculated that, whilst the wealth of France would permit her to bear the strain, it would be impossible for a poor country like Germany to attempt such a task. Germany, however, now possesses the advantage in point of numbers of inhabitants over France, her population being 49 millions, while that of France is 38 millions. This advantage also is one that yearly increases because of the absence of any progress in population of France. If therefore Germany is able to bear the cost of a literally universal service, that is, if the whole of those now

sent into the *Ersatz* reserve are incorporated at once in the standing army, Germany, from the numbers of her population, will certainly be able to supply a larger army than France.

Though all the greater powers of the Continent have adopted some modification of the short "universal service" system, there are some states which may possibly become factors in a European war which retain different systems of their own. The once warlike Sweden retains a very peculiar system, largely due to the conditions of political strife, and by no means a model for general imitation. The other part of that monarchy—Norway—has some semblance of the more usual system. Holland, with her colonial empire, keeps up two distinct armies, one for home service, the other for colonial employment. The latter is entirely a voluntary service, the former partly voluntary partly compulsory.

Of all these states, however, the best worth study is Switzerland. Her method is based almost entirely upon a series of educational tests. Every Swiss is liable to military service from the time he is 19 years of age till he is 44.

Out of the 30,000 recruits who become liable to service every year about 15,000 men are taken. Of these about three-quarters are made up of those who are actually in their twentieth year, the remaining fourth consisting of those put back from previous years. The men thus taken are distributed among the different arms, according to their suitability for them, and then undergo a training of 45 days for infantry, 55 for artillery, and 80 for cavalry. The whole pass an examination in general subjects—reading, composition, arithmetic, Swiss history, geography, and constitution. If they do not attain an adequate standard in these they are kept at school during their recruit course. Thus the recruitment for the army is made a test of the general standard of the education of the country, and that standard is kept up by its means. After the recruit course is over the men become a part of the "*élite*." The cavalry alone attend what are called "repetition courses" every year. The other arms have "repetition courses" every second year, but in the years in which they do not attend these the infantry have to do a certain amount of compulsory shooting practice. The "repetition courses" for the cavalry last ten days, and vary year by year in their character for each regiment or squadron according to a regular roster. The artillery course in the alternate years extends over eighteen days for field or mountain batteries, less for companies of position, &c. The infantry "repetition courses" last sixteen days. Some of the divisions are called up together for large divisional training of all arms, others for detailed training of companies, battalions, &c. Special courses and frequent examinations for

officers and non-commissioned officers are carried on. It may in fact be said that the "instructor," as such, plays a larger part in the training of the Swiss than of any other army. It is the natural result of a pure militia system in which no regular army is maintained. Nevertheless it must be admitted that as a militia system it has been worked out with great perfection, and that every effort has been made to secure its efficiency. As a result the Swiss have about 120,000 men of the *élite*, 80,000 Landwehr, and 262,000 in the Landsturm. There are 288 field guns with the *élite* and 48 with the Landwehr.

In reviewing the conclusions to be drawn from the historical facts recorded in this chapter, it is first of all to be noted that the connection between the political condition of a country and the state of the army has always been a very close one. A system of "conscription" or of "universal service" would have been impossible in France in the days of Louis XI., hardly possible even for Louis XIV. It was not suited to the condition of the times; further, no system devised for a state of things which has completely passed away has ever maintained its efficiency after the circumstances which called it into being have ceased to exist. Each generation has had to apply principles of its own, and to face facts as it found them. No nation has been able to live upon the mere traditions of the past. Each system has been good, or not, as it adapted itself to the national needs, the national sentiment, and the existing facts of the time present.

In our own time, among the nations of the Continent the felt necessity for preserving national life and the acknowledged obligation of every subject of the state to contribute to that need, have produced the demand for large armies. Those armies could not be maintained without ruinous expenditure, without trusting to the perfection of an organization which could only be worked out on paper, which could not, that is to say, be simply represented by men actually standing on parade. The conditions of the time have greatly facilitated the application of adequate tests during peace time to ensure the realization for war of the preparations made for development, largely on paper. War has amply confirmed the wisdom of those who trusted to such a method. Nevertheless for each country special conditions have to be met

according to its circumstances. What would be suitable for Germany would by no means be suitable for Switzerland. What would be suitable for countries prepared mainly for a war in which their troops will enter into a campaign by passing a painted border-stone upon a common road, would be by no means suitable in all its details to a country which is only the centre of a world-wide empire connected by the sea alone.

From the experiences of others we have many lessons to learn, but we have to apply them on our own judgment to our own conditions. No nation has attempted to establish a system of compulsory service for the defence of a colonial empire. No nation has compulsorily condemned its citizens to expatriation for a long term of years.

The application of these facts to ourselves belongs to other chapters of this work.

The German Army Bill referred to on p. 82, was passed by the Reichsrath in July, 1893.

CHAPTER VII.

THE MODERN SYSTEM IN BRITAIN.

1. *The Basis of the System. Voluntary Co-operation of the Population.*

It is proposed in this chapter to show the main principles on which our army system is based.

These are the development of the voluntary system of enlistment, the adjustment of our organization for military service to suit the circumstances of the various classes of the population, enabling each to furnish its contingent, and—above all—trust in that population itself, and in the great qualities of which it has ever given evidence, its high spirit, courage, and patriotism, its physical aptitude and endurance, the mutual good understanding and inter-reliance of its several classes, and its well-balanced common sense.

As to the main body of the army, its distribution and relief, the principle has ever been to treat it as one whole; the entire body benefiting by the experience of service or of warfare acquired by any part of it. In fact the motto *ubique*, borne by certain of its members, is fairly applicable to the British Army itself.

Under the modern system armies are more than ever based on the population; the days of reliance on foreign legions have passed away, together with those when recruits were obtained from all sources and countries, as in the time of the father of Frederick the Great who paid a premium to secure big men. In respect of quality and physique the average in any country is the measure of the standard in its army. If we were to have a system of universal service to-morrow, it is much to be questioned whether the standard for the army would not be reduced rather than raised.

Statistics are wanting ; but want of stature in the army can hardly be complained of unless it can be shown it is not a fair sample of that in the country. It is not the army but the country which is really responsible for a weedy stripling in the garb of a soldier. But it is known that our local government in all its branches occupies itself more and more in promoting the physical development of the rising generation, by drill in schools, swimming baths, gymnasia, not to speak of football, "harriers," &c. Doubtless the extraordinary and rapid development which it is well known attends the young army recruit, will encourage school boards and parochial authorities in their laudable endeavours to improve the physique of our population.

The endeavour of all nations is that their military system should make the most of the powers of their people. The Continental powers achieve this through the method of universal obligation for service ; the British plan, no less well adapted to our circumstances, is the development of the voluntary system, which though somewhat sneered at by foreign writers, is not always understood abroad ; there is perhaps no country which the Continental critic understands so little as England, her military system, and Imperial exigencies. This country prefers the voluntary system and adheres to it, striving to develop it for its own sake and for the quality and good will of the men it gives, the feature appreciated by Mr. Pitt.¹ The recruit who enlists has, to begin with, a vocation to obey and a disposition to respect his superiors, nay more, each one has latent within him, though it may be but smouldering, a certain fire impelling to devotion and duty, and it depends only on the skill of his officers to kindle the spark into flame. Whether before the enemy, on the sea, or in the foreign garrison, the quality of spirit and the tone which the voluntary system confers are of incalculable value ; nor is it only so in the regular army, the volunteer who gives willingly, as many a one does, more

¹ Clode, vol. i., p. 314.

than the number of drills necessary to secure his grant, is equally an exponent of its value.

The voluntary system may be fairly represented as a higher development when compared with compulsory service. An analogy can be claimed as existing between its frank adoption now by the people of this country and the action taken by their forbears in the 12th to the 14th century. At that early period our country people had the wit to compound in money or land with their lords and emancipate themselves from the system of forced labour tenure,¹ which, 500 years later, was a cause of the French Revolution, and which was maintained in some countries of Europe till quite recently. Just as our people compounded for forced labour then, so they compound for compulsory service now, by cheerfully bearing the cost of voluntary service.

It has been shown in these pages how short voluntary service (*temp.* Queen Anne) succeeded the life engagement, how recruiting by beat of drum succeeded ballot,² and how in 1852 a voluntary militia service was preferred to the compulsory, all culminating in the present popular system with its favourable results, so largely due to the adoption of elasticity in the conditions of service and the adaptation of these to the circumstances of the people.

With a rapidly increasing population, large families, and comfortable and cheap life at home diminishing the tendency to emigration, the voluntary system may be said to have fallen on favourable conditions and will continue to serve us as heretofore.

2. *The Scheme of 1872 as developed during 20 years.*

In a preceding chapter was recorded how the reorganization of the army was initiated, and the introduction of the

¹ Forced labour (*Corvée, Robot*)—abolished by France in 1792, by Austria in 1848. Thorold Rogers, "Six Centuries of Work and Wages," p. 218. Gardiner's "History of England."

² William Pitt's act of 1803, good as it was, failed; it was not based on the voluntary principle.

modern system into this country inaugurated, by the measures of 1872, based on the reformed system of enlistment of 1870.

In 1872 the infantry regiments of the line were linked in pairs in brigade districts, styled sub-districts, which were numbered consecutively from 1 to 70. Some of these regiments, namely, those numbered from 1 to 25, had consisted of two battalions each since 1859, but the others had existed as single battalions; and, as was perfectly natural, the process of linking them, and of supplying men from one to the other of the so linked battalions, heretofore unconnected, gave rise to much friction and heartburning from the feeling that the old regimental individuality was slipping away.

Ten years later, in 1881, as will be seen, these brigade sub-districts were converted into the territorial regiments, as now existing, and a renumbering of the regimental districts appropriated to each was effected.

Previous to this, in 1876, a committee under the presidency of Colonel Stanley (Lord Stanley of Preston)¹ had stated its opinion that territorial regiments ought to be formed. This committee, which reported on 9th November 1876 without any dissentients, had been assembled to enquire chiefly into the "general working of the present brigade dépôt system." Its conclusions and recommendations were all in the direction of the progressive development of the system initiated in 1872, and on which a large part of the three and a half millions of money appropriated to its installation had already been spent; in the history of the introduction of our army system, its report ranks next in importance to that of the committee of 1872.² It would be impossible to reproduce here the many features of interest of this report, but one in particular may be referred to—viz., after recalling to mind the twelve wars or affairs in which we had been engaged since 1852, the committee foretold that we should often be compelled to have both line battalions of a territorial

¹ Now Earl of Derby. The Committee was summoned to consider the "Militia and the Brigade Dépôt system."

² The "Localization Committee."

regiment abroad, and it stated the desirability of being able then to expand its *dépôt* automatically without "the necessity of application for special authority" from the treasury or Parliament. Although its recommendations were not fully acted on, the comprehensive and even prophetic treatment of the subject in this report will long recommend it to those who seek to learn in more detail the guiding principles affecting recruiting, training, and other matters of permanent importance to the army.

Finally, the committee trusted that their conclusions would result "in the full development of the system of organization, which, upon the recommendation of the highest military authorities, has been so recently adopted, and approved by Parliament, and by the country."

Although, in 1880, a committee had recommended that the battalions connected in sub-districts should be unlinked, it was decided, in 1881, to proceed actively with the formation of territorial regiments as recommended in 1876. With infinite pains a scheme for constituting and naming the territorial regiments, and for renumbering the regimental districts, involving in a very few instances a re-adjustment of "linking," was drawn up by a committee¹ under the adjutant-general, Sir C. Ellice, and, as already stated, is now in force. The names of the regiments, in some cases long,² were determined on with great deference to, and as far as feasible in compliance with, regimental feeling and wishes, and a plan of numbering adopted, which, though not consecutive, has the merit of preserving the number of the senior of the two old units which go to compose the modern territorial regiment. The old facings of regiments were suppressed and a uniform white for English, yellow for Scottish, green for Irish, and blue for Royal regiments was adopted.

Another ten years or so brings us to 1893, the date of the

¹ "Committee on the formation of territorial regiments as proposed by Colonel Stanley's committee." February, 1881.

² *e.g.*, The Lancashire (47th) linked to the Loyal Lincoln Volunteers (81st) became first the North Lancashire, and, ultimately the Loyal North Lancashire Regiment—a singular combination.

description, now to follow, of the system as it stands after twenty years of varied experience.

3. *The Existing Organization.*

The scheme of organization of the army for the United Kingdom will now be described.

On this scheme the maintenance of the army at home and abroad (not reckoning colonial forces) rests. It may be recorded that it stands now on the foundation laid by the Army Enlistment Act of 1870, in the shape given to it in 1872 by the Localization Committee under Lord Cardwell, and subsequently logically developed in the manner recommended by another government in 1876, which recommendation was put into execution by yet a third government in 1881.

The command of the army is in the hands of the Commander-in-Chief, H.R.H. the Duke of Cambridge. It is exercised through the general officers commanding districts in England, Wales, and Scotland; whilst in Ireland the general commanding the forces is an intermediate authority between the commander-in-chief and the generals commanding districts.

England and Wales are parcelled out into ten district commands,¹ each under a lieutenant-general or major-general, of which two—viz., the Aldershot and the Woolwich commands, affect only the troops quartered in the locality and vicinity, while the others involve the command of the troops quartered within a large area and the immediate control of everything for which the War Department is responsible within their territories; these, with small exceptions,² are conterminous with county boundaries. Scotland

¹ Named, I. North Eastern, II. North Western, III. Eastern, IV. Western, V. Southern, VI. Thames, VII. South Eastern, VIII. Home, IX. Woolwich, X. Aldershot. See Map, No. 1.

² The exceptions, beyond the case of the Aldershot and Woolwich commands, are due to the exigencies of defence organization. Thus the Thames forts in Essex are in the Thames district, and Chichester harbour is placed in the same district with Portsmouth though situated in another county—viz., Sussex.

forms one district command, the Scottish. Ireland is divided into four district commands, those of Belfast, Dublin, Cork, and the Curragh. The generals in command report to the general commanding the forces in Ireland. The Curragh is on the same footing as the Aldershot and Woolwich commands; the others involve like duties with the district commands in England.

Thus, setting aside Aldershot, Woolwich, and the Curragh, there are, in the United Kingdom, twelve district commands in which the generals commanding are responsible for the inspection and well-being of the whole of the military establishments, whether of regulars, militia, or volunteers, within their respective territories.

The territory of each of these district commands is again sub-divided into regimental districts. The map No. 1 shows approximately the counties or portions of counties occupied by the regimental districts, designated by the numbers by which they are known. There are 67 of these,¹ 66 of them maintaining 2 line battalions each and one maintaining 1 battalion, thus accounting for 133 battalions of the line. The two rifle regiments, the King's Royal Rifles and the Rifle Brigade, having 4 regular battalions each, make up the

¹ Of the 67 regimental districts, 7 have their headquarters at the same place as a neighbouring regimental district, forming what is called a "double depôt." Thus there are 60 regimental district headquarter stations and 60 colonels in command of these instead of the full number of 67.

There are in					North Eastern District	11	regimental districts, two of which have a combined H.-Q.	
					North Western District	15	ditto, ditto.	
					Eastern District	..	5 ditto.	
England and Wales						Western District	..	6 ditto.
						Southern District	..	3 ditto, (besides the two rifle regimental depôts.)
						Thames District	..	1 ditto.
						South Eastern District	..	2 ditto.
					Home District	..	6 ditto, one of which combined.	
Scotland, Scottish, including 79th					..	10	ditto, two of which combined.	
Ireland	{					Belfast ..	..	3 ditto.
	{					Dublin ..	..	3 ditto.
	{					Cork ..	..	2 ditto.
					Total	..	67.	

total to 141 battalions, besides the Guards; the rifle regiments have no districts exclusively assigned them.¹

Each of these 67 regimental districts is assigned as the recruiting ground for a territorial regiment² comprising normally two line battalions, two militia battalions,³ the regimental dépôt, and such volunteer battalions as exist within its area. This latter is based on the population within it, on the principle that 100,000 of population should furnish a militia battalion of 1,000; accordingly each district was originally so contrived as to contain about 200,000 males. In England the proportion was practically attained, Scotland was rather over-weighted, and Ireland had fewer districts than the population would warrant. As the population varies, some re-adjustment of limits of regimental districts may at any time prove desirable and would not interfere with the principle. The limits of the districts were determined in 1872 and have practically remained unaltered.

Each regimental district is commanded by a Colonel, selected, preferably but not exclusively, from those who have commanded a battalion of its territorial regiment. Exception is made in favour of colonels from the cavalry who would otherwise be unemployed.

Under the title of officer commanding the regimental district, the colonel commands the regimental dépôt; superintends the training, and inspects the militia and volunteer battalions of the territorial regiment; and pays the men of the reserves belonging to the territorial regiment, having, besides, authority in certain cases over all reservists residing in his district as provided in the Regulations for Army

¹ They are styled territorial regiments in the army list, and have militia and volunteer battalions incorporated with them for purposes of support and association, but have no regimental districts assigned to themselves.

² The term regimental district applies to the area, and that of territorial regiment, to the corps identified with it.

³ There are at present 9 regimental districts which have more than two militia battalions and 23 which have less than two and the policy has been, as circumstances might admit, to reduce the excess in the former by consolidation, or conversion to artillery, and to give an increase to the latter by augmentation, or by dividing large battalions and making some addition to the existing number of companies, so as to bring all to the normal.

Reserve, 1893.¹ A prime feature in his duties is the direction of the recruiting service for the regular army and for the militia within the limits of his district. He is thus as was originally intended, the chief military authority "commanding-in-chief"² in his district, within his own sphere of duties.

The two line battalions of a territorial regiment are localized, that is, connected with the regimental district for purposes of recruiting, and also in view of rendering each other mutual support, on the principle that one should be always at home and able to act as a feeder to the other abroad. It is necessary that this feeding should proceed with great regularity. The soldier being engaged to serve a given number of years, it is known beforehand at what time and in what numbers men will be due to come home. Consequently either once or twice a year drafts of young soldiers have to be got ready for embarkation to take the place of the men for discharge or transfer to the reserve. The preparation and training of these drafts is the great business for the year of the home battalion.

The localization of the territorial regiment goes no farther than has been stated. It is no part of the system that either of the line battalions should be quartered in the regimental district; the barracks available do not admit of this, and even if a battalion were so placed it would not be under the command of the colonel of the regimental district as such. Nevertheless, and for the purpose of keeping up local connections, it is customary when circumstances admit to send battalions, especially on return from abroad, to be quartered in the neighbourhood of their own districts. A reference to the Army List will show that this object is often achieved.

Two militia battalions are assigned as the normal proportion for a territorial regiment, in order to facilitate the support either of the line or militia portion; the embodiment

¹ See also chap. viii. (Infantry).

² See *ante*, chap. v., p. 63.

of one militia battalion would promote the supply of men if both line battalions were abroad, while if, in the event of serious war, one militia battalion were sent away or abroad, the embodiment of the other would provide a feeder for it. In every case the embodied militia battalions would preserve their own coherence as military units, capable of rendering effective service wherever required within the recognized limits, and, in short, occupying a position very analogous to that of the home line battalions in ordinary times. It was the intention of the Localization Committee of 1872 that during serious war all enlistment should be for service in either the militia or the line battalions of the territorial regiment, but there has not been occasion since then for knowing whether this policy would be adopted or not, and no provision has been made for giving effect to the recommendation.

At the back of both line and militia battalions is the regimental dépôt at the regimental district headquarters. It is organized in four companies, originally the ninth and tenth of the two line battalions. It is officered, in small but sufficient numbers, from the line battalions, militia officers being called in to assist when the dépôt is extra strong in recruits.

It is a principle that the line and the militia recruits should both be drilled at the dépôt under the same discipline, the latter joining at once on enrolment, unless they elect to wait until the period for the training of their battalion approaches. Thus, in the dépôt, military work and training are going on all the year round. It is equally a principle that the whole of the officers and non-commissioned officers constituting the "permanent staff"¹ of the militia should be employed on this work, at the disposal of the officer commanding the regimental district,² throughout the year, except

¹ The "permanent staff" are those officers, N.C.O.'s, &c., who are retained all the year round, on pay, at the H.Q. of the militia battalion.

² Where a regimental district embraces two counties, in some cases the militia headquarters of the out-lying battalions are designedly left in their old locality and county, *e.g.*, the Herefordshire Militia, which remain at Hereford instead of being brought to Shrewsbury.

during the training of their battalions, when they are handed over to their own militia commanding officer and their places are temporarily filled, so far as requisite (*e.g.*, the adjutant and quartermasters), by the line officers of the *depôt*.

It was always contemplated that in times of emergency the *depôt* should be augmented to the strength of a battalion,¹ but there has been no actual experience to put this to the test. Under present arrangements the necessary number of men for a small battalion would quickly be collected, and it is only requisite to provide on paper for a proportion of officers to command. If Continental analogous cases be followed, an organization should exist on paper for the formation of a battalion from the *depôt*, with an arrangement for leaving behind a fraction to form a fresh *depôt*, should it become necessary to move the battalion to other quarters. The *depôt* must always exist in the regimental district for recruiting, drilling men on enlistment, and for conducting the necessary business connected with the men's engagements and records.

It is desirable that it should be known how the *depôt* is circumstanced as to accommodation, in order to guard against erroneous ideas on this point. The barracks necessary for the accommodation of the headquarters of the regimental district, which includes the *depôt*, were located, in pursuance of the scheme of 1872, in many instances at places where there had been previously no troops, where no barracks or only small detached barracks existed, and everything had to be built at considerable cost, three and a half millions having been raised

¹ So spoken of by Localization Committee in 1872, and in speeches of ministers and in papers since.

As first constituted in 1872, the *depôts* had 4 captains and 4 subalterns each. This was found excessive as the officers had no duties; 1 major, 1 captain, and 2 subalterns now suffice, but additional officers would be needed if a battalion were to be formed. As to non-commissioned officers, as contemplated in 1872, they would be appointed from the reserve. As to officers needed on expansion of the *depôt*, see the article on Reserve of Officers, in chap. xix. The Regulations for 1st Class Army Reserve, 1893, show that non-commissioned officers from the reserve would revert to, practically, their old places in the seniority list. Precise arrangements are as yet lacking regarding the posting of either officers or non-commissioned officers to *depôts* on their being expanded to the strength of a battalion.

and expended for the purpose. The accommodation provided was for about 250 troops besides the "permanent staff," and the necessary storehouses. This small amount of accommodation is generally sufficient for its purpose; but even when dépôts have to be increased to a strength of 300 men, as often happens, special arrangements must be made. It is only in some half-a-dozen instances that dépôts are exceptionally situated where there is a large barrack capable of accommodating an overflow. It would be impossible therefore, except at renewed heavy cost for building, to increase permanently the strength of dépôts at their headquarters. The augmentation spoken of as occurring on mobilization would be met by special temporary arrangements such as by camping, in the season, or by hiring; and the conditions point to the desirability of so organizing matters as to be able at such a time to send away the bulk of the men to more distant barracks vacated by troops sent elsewhere.

The number of volunteer corps to a regimental district is subject to no rule—it depends on the number existing within its area.

The men belonging to the reserve (1st class and 2nd class of the territorial regiment, also all pensioners of the territorial regiment, have their papers kept at the dépôt, are paid by its paymaster, and look to the officer commanding the regimental district as their commanding officer. The reserve men, by the terms of their engagement, are liable for general service with the arm, whether artillery, cavalry, or infantry, with which they served their time with the colours, or from which they passed to the reserve. As it is the system, however, that all reserve men should, when called up, serve if possible with their own regiments, it follows that on mobilization those reserve men residing within a regimental district who had not served with its regiment would go elsewhere to join the dépôt of their own regiment, and at the same time such of the reserve men belonging to a regiment as did not reside in its district would come to its dépôt from whatever districts they might be living in.

A further reserve force connected with the regimental district is the "militia reserve." This remains with its militia battalion till called on. When a militia battalion is inspected the militia reserve is always specially reported on.

Thus far the infantry only has been dealt with; it forms the bulk of the army and its organization in territorial regiments constitutes the principal feature of the army system. The method pursued in recruiting and maintaining the remaining arms or components of the army—viz., the artillery, cavalry, engineers, army service corps, and other branches will now be touched upon.

Of these the Royal Artillery and Royal Engineers alone have a territorial connection. For the Royal Artillery the United Kingdom is divided into nine recruiting areas, which are militia and volunteer artillery districts, grouped under three garrison artillery divisions—viz., the Eastern, the Southern, and the Western.¹ A lieutenant-colonel is appointed to each under the title of officer commanding militia and volunteer artillery. Under the command of this officer (except in one case), there is either a *depôt* or sub-*depôt* which is worked by the permanent staff of the militia artillery of the district aided by officers and non-commissioned officers appointed from the regular artillery. The lieutenant-colonel has, under the colonel commanding the artillery, the duty of inspection and command of the militia and volunteer artillery corps within his district. For recruiting purposes he disposes

¹ Eastern Div. Dover (has 2 recruiting districts)	Depôt, Dover, with a Sub- depôt at Gt. Yarmouth	Supplies 1st Depôt Divn. Fd. Art. with recruits.
Southern Div. Portsmouth (has 5 ditto)	Depôt, Gosport, with Sub- depôts at Seaforth, Leith, and Templemore	Supplies 2nd Depôt Divn. ditto.
Western Div. Plymouth (has 2 ditto)	Depôt, Plymouth, with Sub-depôt at Sunder- land.	Supplies 1st Depôt Divn. ditto.

The districts are known by the names of the *depôts* attached to each. One of the Southern Division—viz., Belfast, has no *depôt*. The metropolitan area, i.e., London and Woolwich, is treated specially, the recruiting therein being conducted by the general recruiting staff.

of the staff of his command in a manner analogous to that followed in the infantry regimental district.

The territorial connection of the Royal Engineers is effected through the "Commanding Royal Engineer" in each district command of the United Kingdom, who has under his orders for recruiting purposes the staff of militia and volunteer engineers.

Enlistment for the Royal Artillery and Royal Engineers being for general service within these corps respectively, transfers can at need be made within them; thus there is no occasion for any linking or special arrangements for mutual support of batteries or companies. This principle also applies to the army service corps and minor branches.

As regards cavalry and other branches having no territorial connection, a certain number of non-commissioned officers are detailed from their corps as special recruiters, and are placed under the orders of the officers commanding regimental districts, or of the staff officers,¹ appointed independently of the regimental district organization, specially to superintend recruiting in certain populous centres.

With the cavalry, enlistment is usually for individual regiments, and men serving with the colours cannot be transferred without their own consent. The Localization Committee of 1872 did not connect the regular cavalry with the yeomanry for purposes of recruiting, because the sources of supply of men to the two are so widely distinct. Neither did they link or otherwise connect the regiments of cavalry together for mutual support. The want of such connection has been felt, but no scheme has as yet found favour.² The recruits for cavalry at home join their regi-

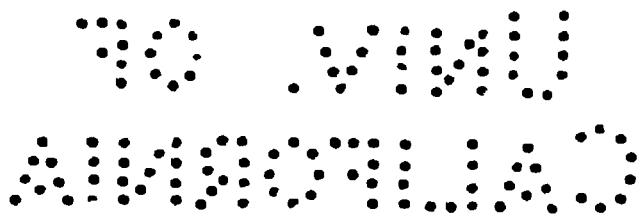
¹ See chap. xix. (Recruiting).

² This passage has been left as it was written, so that it may help to the better understanding of the situation. The Army Orders of March, 1893, as foreshadowed in the speech of the Secretary of State on the army estimates this year, inaugurate a new order of things for the cavalry. Henceforth the cavalry recruits will be enlisted for the corps of household cavalry, dragoons of the line, lancers of the line, or hussars of the line, and regiments of cavalry within these branches respectively will be able to give each other mutual support by way of transfers.

ments direct, those for cavalry regiments abroad join their regimental depôts at home, these being grouped under one command at Canterbury.

It has been shown, p. 95, that localization is one thing and the actual location of the troops another. As to the latter, vastly important as it is for the training and efficiency of an army, our policy has been for years past that which was urged by the Localization Committee of 1872 in their final report, paragraph 112—viz., to promote the concentration of the three arms, infantry, cavalry and artillery in large stations, thus facilitating tactical training. Of the then existing tactical stations, namely, Aldershot, the Curragh, Colchester, and Shorncliffe, the two last were enlarged after 1872. The tactical camp of Strensall in Yorkshire has been created in pursuance of the recommendations then made, the barracks at Glasgow and Belfast enlarged, and an extensive area for camping purposes acquired at Barry Links, near Dundee. The further recommendations—a camp of instruction near Lichfield, about Cannock Chase, and the development of Chatham as a training centre for infantry have remained unfulfilled, but the capabilities of Aldershot and the Curragh have recently been augmented. In a country presenting such difficulties for carrying out annual manœuvres as England the policy of quartering the different arms so as to be in touch with one another is of the greatest importance.

Having shown the framework and organization of the component parts of the territorial regiments, and their sources of supply of men, mention may be made of the terms of engagement of the men who are put into that framework, in respect of duration of service with the colours and in the reserve. The mass of men, *i.e.* those for the Line, (cavalry and infantry), and the Royal Artillery, enter for seven years with the colours and five in the reserve, or eight years with the colours and four in the reserve, if the period of army service expires while the man is abroad. The Foot Guards and Royal Engineers have the option of the above, or of three years army and nine years reserve service and an additional



year of army service if abroad. All recruits for the Army Service Corps enter for three years army, and nine reserve, service.

There is a supplemental reserve which is formed of men engaged to continue their reserve service for four years after that contracted for, as above, has expired ; this is section D of the first class reserve.¹ The second class reserves of 1859 and 1867, &c., have practically ceased to exist.

The first class reserve of all arms numbered on April 1, 1893, 80,554, including section D ; of these, excluding section D, 46,940 are infantry of the line,² which is more than sufficient to raise the whole of our line regiments to the war strength, according to either the home or foreign establishments, after completing which the remainder would be available to supply the enormous waste which at once begins to set in when troops are engaged on war service.

This main factor, the reserve, will again be referred to when the working of the army system in war is dealt with, and also in the general conclusions at the end of this chapter, but there is one result of the system of short service with reserve, which is important enough to be dealt with here—viz., the facility it affords for dealing with the problem of marriage in the army.

The reserve, on the expressed intention of its founder, see page 59, is the home for the married man, or of the soldier who would marry. Through short service, the miseries attending the marriage of privates in the army, the separation of families, and “ marriage without leave,” have, for the most part, been got rid of, and, by the certainty of early transfer to the reserve,³ the prospects of those who wish to marry have been rendered more hopeful. The case of the higher

¹ By the Reserve Forces Act of 1882, section D is not liable to be called out until after the rest of the 1st Class Reserve.

² The balance is composed of—

Guards,	Cavalry,	Artillery,
Engineers,	A.S. Corps,	Miscellaneous.

³ See an article by an army chaplain in the “ United Service Magazine,” November, 1892, on the evils of marriages without leave in the army. The obvious remedy—viz., early passage to the reserve is not once mentioned.

non-commissioned officers is quite a different one; their means and their position are secured, and the presence of their wives and families is welcomed. The facilities offered by the reserve system for diminishing the *incubus* of married men should be kept in view. Those who would go back from the short service system must face the old evils of an excessive train of women accompanying each regiment, from which happily we have escaped.

4. Maintenance of the Army in Peace at Home and Abroad.

In showing how the army is raised and maintained, its framework and the material put into it have been sketched; the next step is to gain a clear conception of what has to be maintained. The infantry of the line, at once the principal element in the army and that which presents the most difficulties, will alone be dealt with in this connection.

In order to have the army machine ready for its prime duty in war the plant must be maintained in proper condition during peace. Let us consider then first the battalions abroad, and next those at home, remembering that both have to be kept ready for service under certain conditions.

Under the system of short service, save a certain small proportion, all soldiers enter the army to leave it again in seven years, or eight if abroad; therefore, in maintaining the battalion abroad everything depends on the strength at which it is to be kept up; technically this is called its "establishment." It has been found necessary to make the establishments for India and the Colonies considerably larger than they were twenty, or even from seven to three years, ago, and the demand for men to replace the annual outflow is proportionately increased.

The estimated establishments abroad are now easily remembered¹: 52 battalions in India have 1,032 of all ranks; 13 in the Mediterranean and certain Colonial stations in the

¹ As fixed by Army Orders 7th July, 1892, modified by Army Estimates 1893-94. The battalions at 1,032 of all ranks have 941 rank and file, and those of 892 of all ranks have 801 rank and file.

tropics, and 5 in Egypt have 1012; and 6 battalions at other Colonial stations have 892 of all ranks. The battalions at home¹ have now a uniform establishment of 801 of all ranks of which 721 are rank and file, *i.e.*, corporals and privates. The establishment abroad is practically that laid down for *war strength*, which is, for foreign service, 1,095 of all ranks, including details such as the 32 drivers for the regimental transport, which, in some regions abroad would not be required.

If all men were to engage for eight years only, and there were no casualties, the calculation of the efflux from each battalion annually would be of the simplest character; in a battalion recruited in equal numbers each year one-eighth would have to be replaced annually. Owing, however, on the one hand, to "casualties" arising from men "extending" their service to 12 years, or "re-engaging" for 21, and on the other, to those arising from invaliding, death, or discharge, the average outflow from the battalion abroad is not thus easily determined, and is, in practice, much higher. Actuarial calculations, based on the data of a ten years' experience, place it at 165 for the 1,032 establishment of a battalion in

¹ When the system was first started in 1872 there was no reserve to speak of, consequently there was a natural desire felt that the battalions first for foreign service in case of emergency should be kept at the war strength or something near it. This was the reason why, at that time, the first 18 battalions on the roster had a higher strength than others—*viz.*, 820 rank and file, while the next 18 had 620 rank and file, and the last 35 battalions 520 rank and file, the average being thus 641.

This plan of having the establishments of battalions at home at various strengths was continued until 1892, much longer probably than was at all necessary even from the point of view above described, for long before 1892 there had been reserves enough to complete the battalions to war strength. But the plan followed latterly, of having a few battalions at the top of the roster at an exceptionally high strength, was otherwise faulty; the higher establishment battalions had in their ranks an abnormal proportion of young soldiers, owing to larger numbers having been enlisted in the year in which the battalion establishment had been augmented, and many of these men, not being old enough for service in India, proved to be an encumbrance.

Ultimately it was found that, when link relieved link, battalions on the 721 rank and file establishment were strong enough to supply the average draft, and, when the time came, to relieve their foreign battalions efficiently. For this reason, in July 1892, all battalions at home were placed on one uniform establishment of 721 rank and file, and with this alteration, a fertile source of embarrassment was done away with.

India, and 145 for the 892 establishment in the Colonies. The home battalion must therefore be in a position to furnish annually a draft of 165 men (or 145 as the case may be) to maintain the sister battalion abroad. The same calculations show that the reserve at home is fed at the annual rate of about 130 for each regiment of two battalions.

Such a demand on the home battalion is already considerable; it is the more onerous when it is remembered that enlistment is effected, for thoroughly approved reasons, at from 18 upwards, while the men are not eligible to go to India until they are 20, consequently any marked excess in the number of casualties to be made good in the foreign battalion, which might necessitate sending out a draft of 200 or over, would tax the home battalion too severely. Difficulties of this kind are almost invited whenever (as has been done in the past) a battalion is raised suddenly from, say, 600 to 800 strong, or soldiers are arbitrarily invited to extend their service in large numbers simultaneously, both measures entailing an abnormal outflow some years later. Therefore the whole secret lies in this, and to this the efforts of the administration are directed—that there should be no material departure from the average.

The maintenance of uniformity in the several units, both as to numbers and circumstances, is the condition which best favours the possibility of these averages being adhered to. Care has to be taken that the demand from the battalion abroad is not excessive, and that the power of supply within the home battalion is maintained. It is in order to maintain this uniformity that approximately similar establishments have been given to all battalions in India, the Mediterranean, and the tropics, while the battalions at home have their own uniform establishment. By this means, great fluctuations are avoided, the battalions are recruited gradually, and there is no excess of casualties in any one year. It is estimated that with the home battalions at a uniform strength of 801 of all ranks (721 rank and file), those abroad will be supplied with regularity, whilst the home army will be able

to retain its cadres in sufficient strength and with sufficient service to be equal to expansion to the war strength when supplemented, as intended, by the reserves.

But the whole is such a tight fit, if we may be allowed the expression, that the greatest care has to be exercised in administration in order to secure efficiency.

The actuarial calculations referred to above show also, with regard to the home battalion on the establishment of 721 rank and file, how many men each such battalion should have in its ranks within the several categories of "under one year's service," "under two years," and so on. A standing War Office committee now exists (and it would have been well had it been in activity since 1872) which is charged with the duty of attending to the service of the drafts; it watches to see that there is no important deficiency in the number of men of each year of service which each home battalion should have in its ranks, and it rectifies any shortcomings which may from time to time be found.

The nature of the action to be taken if numbers had to be thus rectified would be somewhat as follows:—if there were too few¹ men under one year's service in a home battalion a certain number of men could be offered the opportunity of passing to the reserve before their time, and recruits could be admitted in their place;² this is conversion of service. Other means for rectifying false conditions are:—extension of service³ to 12 years, with or without bounty; the dis-

¹ There ought to be 255 in each home battalion.

² For the last two years it has been the practice to include in Estimates provision for a certain number of men outside the regimental establishments, (1,000 men were so provided in 1892-93). This enables the administration to enlist additional men for battalions where more young soldiers are required, and so to keep to the proper averages.

³ Sir A. Haliburton points out in paragraph 46 of his dissent to Lord Wantage's committee that when extension of service is permitted on a large scale, or additions to the army are made, special means should be resorted to for raising men to replace those who would thus be quitting the army seven years later in larger numbers than the average. Such means should be taken three years before the efflux is due, so as to attenuate the strain. Parliamentary powers would have to be applied for "*as part of the cost of the original measure.*"

pensing with the eighth year of service abroad ; or, volunteering to another regiment, preferably a neighbouring territorial regiment.

So far the matter has been considered as though, as originally intended, each territorial regiment had one battalion at home to one abroad, and this is the condition of things to which every effort is being made to revert ; but experience shows that provision has to be made for some regiments having both battalions abroad.¹ In this case the practice is to raise the strength of the *depôt* to 300 rank and file.² It is intended this should be done in future one year before the second battalion goes abroad, to be reduced again one year before one of the two comes home.

It has to be mentioned that, owing to the troops for India leaving at one season of the year, coupled with the waste at home, and the parliamentary limit not being allowed by law to be exceeded at any time, the army at home must always be below its nominal establishment.³ The average deficiency is calculated at 1,842 men for the infantry, or if each individual battalion were prevented from exceeding its establishment, this average would rise to 4,206 men.

5. *System of Relief.*

It is necessary to describe the system of relief of battalions abroad, and notably in connection with the obvious requirement that, when a home battalion proceeds abroad, it has at once to be raised to a higher establishment, generally from 801 to 1,032.

¹ At date of 1st July, 1893, 7 territorial regiments had both battalions, and one regiment, the Cameron Highlanders, had its single battalion abroad. It is hoped the 7 may be reduced to 4 within the year.

² The substitution of a large *depôt* at home for the proper home battalion is a bad remedy and only admissible as a temporary measure. Sir Arthur Haliburton points out in p. 33 of his dissent (see Lord Wantage's committee report) that no system is more wasteful than that of supplying battalions abroad by large *depôts* at home, for they are not organized for field service at need, and, consequently, a number of troops are retained whose utility is limited.

³ The force maintained is not the maximum voted but the average that that maximum will yield. (Haliburton, *et supra*.)

There is a general roster for India and the Colonies so that every regiment should have its share of service in each. This system acts favourably, as we shall see, in facilitating the relief of a battalion by its linked battalion of the same regiment; it enables a battalion to be sent to the station where it is convenient that it should be when relieved by its link.

The time of service for the battalion abroad is, as a rule, 16 years; this affects the cadre chiefly as, of course, the men come home on the expiration of their short service. Our system, as to length of service, is based on this, that the soldiers should give an adequate number of years of service in India, and yet be relieved early enough to prevent augmented losses from climatic influences. As to those who have re-engaged, it is intended that they should return home after 8 years abroad; by regulation, they record their names to go home, and they are sent home in due course, subject to the exigencies of the service; this beneficent regulation does not apply as yet to the cavalry.¹

When a battalion abroad is relieved, a number of its men are available for further service abroad, in their own regiment. The principle is therefore followed of causing each battalion to relieve its link, when, by taking over the available men, the battalion from home is at once raised to the foreign establishment. By sometimes moving on a battalion from the Colonies to India before the time has arrived for its relief from home, the principle of one battalion relieving its sister battalion, or as it is sometimes called, of link relieving link, can be followed without confining Indian service to one set of regiments exclusively. Should link not relieve link, volunteering from one regiment to another may have to be resorted to—an ancient practice, but one “more honoured in the breach than in the observance”—for the traditions of volunteering for bounty have a savour of demoralization with a corresponding lowering of regimental tone.

¹ See Q.R., 1892, sect. xix., para. 7, and sect. vii., paras. 331–335.

A feature in the system of working reliefs, which however is devised only as a temporary expedient to be abandoned when we shall have attained to the normal condition of one battalion abroad to one at home, is that of the so-called "short tour," by which battalions low down the roster for foreign service are sent to stations in the Mediterranean, for a stay of less than the usual term. The object in view in this arrangement is to enable the principle of relieving one battalion by its sister battalion to be always followed, whereby the difficulty of change of establishment is got over automatically, as just shown. In short, when a certain number of regiments must, from force of circumstances, have both battalions abroad, the home battalions to be detailed are selected from a position low down on the roster, so that they have time to complete their short tour, and come home again for a term, prior to being required to relieve the link abroad in the ordinary course.

6. *The System as adapted to War.*

"The sole object of any military system in peace is to provide for a state of war; and the test of any peace organization must be its power—

"1st—To place in the field immediately on the outbreak of war, in the highest state of efficiency, as large a force as is possible compatibly with the peace military expenditure;

"2nd—To maintain that force throughout the continuance of hostilities undiminished in numbers and efficiency."¹

In their report, from which we have quoted the above, the Localization Committee of 1872 proceed to show what measures would probably have to be taken in the contingency of an outbreak of war, and of a decision to send to the scene of action, say, 50 battalions of infantry, without diminishing the Indian and Colonial garrisons; thus leaving 50 regiments without any line battalions at home. Their views are here shown *in extenso*; those passages which refer to measures necessary then, when there was scarcely any reserve, but which are so no longer, are given in italics.

¹ Report of Localization Committee, 1872.

"1st—All line battalions at home to be raised to war strength, the 50 expeditionary battalions being first considered, by calling up army reserve men to the colours, *supplementing the deficiency, if any, by militia reserve and volunteers from militia battalions.*

"2nd—In each of the 50 districts required to furnish expeditionary battalions, embody both militia battalions.

"3rd—In each of the remaining districts embody one militia battalion.

"4th—Complete each *depôt* centre to a full battalion to serve as a training battalion for recruits.

"5th—Complete all embodied militia battalions to war strength.

"6th—Make all enlistments during the war for general service¹ in the line and militia battalions of any brigade district (territorial regiment)."

The committee go on to say that in comparing the probable results of the newly proposed method with the known results of that hitherto employed, there is little reason to doubt that the new plan would supply reinforcements during war with certainty and regularity.

The principles laid down in the above scheme are as much in force now as when first written down and approved, and the essential one, which is disclosed in the first of the above paragraphs, is this—that the reserve completes the army: though called reserve, a term elsewhere shown as borrowed from abroad, it really forms, or at least goes to form, the "first line." The reserve forms in fact the home army.

At the time when the committee wrote their report (1872) they estimated that, of the 71 battalions at home, 18 would have required 180 reserve men to complete them to war strength, 18 would have required 300, and 35 would have required 480 men each.² With the establishments now existing, the situation of the home battalions when augmented by the reserve to war strength would be very different from the above forecast made in 1872. Moreover the administration has now a better knowledge than then of the probable age and length of service of the men serving with the colours at any particular time, and of their consequent fitness for service.

The situation on a general mobilization can therefore now

¹ No steps have as yet been taken to give effect to this policy of recruiting for general service, line or militia, in war.

² No deduction being made for recruits untrained.

be forecast with some confidence as follows:—in the event of a great war, when all transfers to the reserve would be suspended, and when, except at a seat of war, the battalion abroad could be maintained by a draft of 50 men, the mobilized home battalion, numbering 953 exclusive of officers would stand thus: 500 men, or over that number would be men serving with the colours, and the remainder would be men from the reserve. It is here assumed that all recruits would be sent back to the *depôt*, so that the colour service men would at least be in the second year of their service and more than half of them would be in their fourth year and upwards. Of the reserve men four hundred would be in the ninth to the twelfth year of their service, that is in the twenty-seventh to thirty-first year of age; each would have had seven or eight years service with the colours (except in a few instances), coupled with an experience of travel and of seeing foreign lands. It may be confidently stated that an army of men of the “good old mixture”¹ of English, Scotch, and Irish, composed as shown, would be unequalled.

All battalions have not at the present moment men in their ranks of an age to give results quite so satisfactory as the above; this is due generally to such circumstances as have been already alluded to, p. 105, and will be again, pp. 115 and 116, but the principles of the system now pursued will give these results, and surely their attainment is worth a consistent and persevering effort and some sacrifice.

But though it is easier to enunciate principles than to act on them and resist the temptations and the pressure

¹ This phrase we owe to General Lord Seaton, the “Colborne” of Napier’s history; the “mixture” is a feature kept well in view through all changes. The Localization Committee of 1872 say, paragraph 126, “Under a system of voluntary enlistment, battalions localized in England, Ireland, or Scotland, need not necessarily become either purely English, purely Irish, or purely Scotch; and by means of the recruiting arrangements suggested in paragraphs 81 and 82 (*viz.*, that, when expedient, regiments should recruit partly in other than their own districts), the much to be desired result might be obtained of having battalions in which the three sister kingdoms would all be represented.” N.B.—This disposes of the reproach sometimes levelled against the system, that it fails to secure after all county or national regiments, for this never was its exclusive object,

urging departure from them, which come from many quarters, popular, administrative, and professional, it is as well at least to endeavour, as has been done in these pages, to show the value of a persistent adherence to principles gathered from experience, and the evil and self-avenging consequences of reaction, and that, in the main, these principles have been followed. The nature of the pressure towards a reaction from professional quarters has been alluded to, and it has to be guarded against. After all, the regiments exist for the nation, and the officers exist for the regiments. Whilst the command given by the Queen's commission imposes the obligation of high duties, responsibilities and initiative, it confers a tenure of service interest—not a life interest, and still less, a proprietary claim. In the language of the Localization Committee of 1872,¹ 'The question for consideration is, not what is best for the efficiency of this or that service taken alone, but what is best for the military interest of the nation'

There is a valuable element in the reserves, whose employment in war has not yet been referred to, that is, the militia reserve, numbering about 30,000 men. These men would not have at the outset the training of line soldiers, and their function would be that of a true reserve, *i.e.*, something to fall back on. Assuming the embodiment of the militia, the militia reserve men would rapidly gain in efficiency and would very soon be admirably adapted to the purposes of making good the waste in the regiments on foreign service. They represent with us the *Ersatz* reserve of the Germans, see p. 76. This function was insisted on by the Localization Committee of 1872. Speaking at a time when there was hardly any other reserve, they illustrated their views, in somewhat extreme fashion, as follows² :—

"The expeditionary battalions to be sent against the enemy should be composed of the very best soldiers that can by any possibility be obtained Rather than resort to militia reserve for filling up those battalions,

¹ Localization Committee, 1872, para. 52.

² *Ibid.*, para. 48.

it would be greatly preferable to exhaust the whole of the army reserve for that purpose, and afterwards to have recourse to volunteers from those line battalions intended to remain in England. The home battalions by such a process would suffer temporary not permanent deterioration; but it is quite conceivable that the despatch of our very best soldiers to the seat of war in the first instance might have an important effect in shortening the duration of the struggle. It would be of little practical use to maintain a number of battalions at home at a full establishment of highly-trained soldiers if those soldiers were not to be permitted to take part in the fray. . . . But the completion of the expeditionary battalions to war strength forms the smallest part of the task imposed on the administrators of the army. These battalions must afterwards be maintained in the field in undiminished numbers and efficiency. For the supply of war casualties the men of the militia reserve would form a valuable element. A militiaman after having passed through one yearly training and six months' embodiment in addition thereto might be depended on to fight side by side with the more veteran soldiers of the field army."

And again—answering the objection that militia battalions would be deteriorated by the transfer—

"Militia battalions like line battalions temporarily deteriorated by the transfer of their men, would be restored to their normal condition by means of the recruiting arrangements above detailed, in the shortest possible time; so that both militia and line battalions might be found in a state of perfect efficiency for any service which an emergency might require them to perform."¹

But besides the case of a war of the serious nature above contemplated there remains for consideration that of such wars as do not constitute a declared national emergency, justifying the calling out of the army reserve. It so happened that in 1878–79, seven years after the institution of the present system, and before we had settled down to it, two such wars were on hand at one and the same time, so-called minor wars, at the Cape and in Afghanistan. The then Minister of War, Colonel Stanley, in his instructions to the committee on

¹ When the reserves are called out recruiting should go on all the same and the reserves should be supernumerary to the numbers of the Army fixed by Parliament for the year. This is most important. If it is not done we become liable to a repetition of what occurred in 1882, when recruiting was suspended only to be resumed with increased energy later, entailing an excessive influx and a corresponding excessive efflux seven years later with all its attendant evils and dislocation of the system of drafts.

See Sir A. Haliburton's minute of dissent to Lord Wantage's committee, p. 45.

army reorganization under General Lord Airey (1880), stated, paragraph 3—

“During the Crimean war, as is well known, regiments were first denuded of their best men in order to fill up battalions which had proceeded on service, and then were themselves in turn sent to service in the field having lost their best men and with their ranks newly filled up. This was felt to be a grave evil,”

After showing that the army scheme for any great emergency occurring now was to complete the battalions from the reserves, he continued—

“It might be inconvenient to disturb the relations between capital and labour by suddenly calling out the reserve in the case of the small wars which are inseparable from the maintenance of an empire with outlying dependencies.”

He further showed, paragraph 13, that the Localization Committee of 1872, did not take these minor wars into consideration, and that it had assumed

“that parliamentary powers would always be available, either to increase the depôts arbitrarily, or to call up such portions of the militia as might be thought necessary. It is abundantly clear, for the reasons referred to in paragraph 3, that neither of these courses could always be proposed by any government in the case of the colonial or other minor wars in which we may find ourselves engaged.”

It seems probable that these views would still find acceptance, and that neither reserves nor militia could be relied on, while an increase of the depôts, if granted, would only give mere recruits. Under these circumstances the home army, including the Guards, is alone available,¹ unless indeed circumstances enabled us to employ the physically and numerically strong battalions in the Colonies; this, however, might not be admissible, and it is always inconvenient from the point of view of supply of war equipment, if not of the necessary transport.

But as to the average age and service of men with the colours, we are better off now than when Colonel Stanley's instructions as above were penned, for we owe it to the com-

¹ Under certain circumstances Royal Marines have been employed but they can hardly be reckoned on because of the requirements of the Navy.

mittee thus addressed that service in the line is now for seven, or eight years, where formerly it was for six years only, and the average age is raised accordingly. This was a chief point to which the attention of that committee was directed, the evil having been (see instructions, paragraph 4) that the battalions then in the field had not a sufficient quota of seasoned men, being "full of young soldiers." Let us see therefore how the battalions at home stand now in respect of ability to supply a force for field service. The actuaries' calculation of the normal constitution of our home battalions as resulting from the change in the term of service since the above complaint was made, shows that on their now uniform establishments of 777 non-commissioned officers and men (reduced to 698 by reason of their being always below establishment, see p. 107), each battalion should always have 340 non-commissioned officers and men in the third year of service and upwards, or, if we admit men in their second year of service, there would be 493 non-commissioned officers and men per battalion. As to the fitness of such men, we may remember that the ages on enlistment are such that it is at $1\frac{1}{2}$ years' service on an average that men are fit to proceed to India. But in considering the fitness of battalions to go abroad for a small war the service of the draft for the year must not be disregarded. If it were, the places of the men, say in India, who have completed their service, would not be filled up. This has been gone into and the calculations referred to show, in a normal condition of things, how matters stand when the battalion is at its lowest, *i.e.*, after the annual draft has left; it is found that then, excluding men under one year's service, each battalion should have a strength of 409.

But, not to base everything on calculations of averages alone, and as an ounce of fact is said to be worth more than a pound of theory, let the returns be examined. These showed in Nov. 1892, that of the battalions at home there were sixteen in which, after providing the foreign draft, there were 400 men (or within 20 of that number) over one year's ser-

vice.¹ This is the actual state of things under all the drawbacks arising (1) from the irregular establishments hitherto kept up; (2) from the imperfections in working the system which have been disclosed; and (3) from our having an excess of battalions abroad over those at home.

The conditions point to this, that when a force is to be sent abroad for a small war, the procedure would be to utilize the Guards, and as regards the line, to despatch small battalions rather than large, and more of them, retaining at home the young men in their first year, whose training would be proceeded with so that they would be fit to supply, partly or wholly, the drafts for foreign stations.

The resource of drawing volunteers from the reserve could always be relied on to maintain these battalions sent on service, or if necessary to augment their strength.²

7. Conclusion.

Now that its main features have been discussed, some general remarks on the working of the system may be offered, and those principles recapitulated to depart from which is to court danger.

As to the *present situation*, although recruiting prospers, abnormal pressure for drafts still prevails. This pressure culminates in 1890-93, and the excessive influx of men now, will, of course, have its after effects in seven years time—1897-1900, unless guarded against.³ Some of the causes of this pressure are—

- (a) The stoppage of recruiting in 1882 when reserves were called up;

¹ As one-fourth of infantry recruits are 20 years of age on enlistment the deficiency on the number 400, arising from sickness, &c., could be made good generally by taking men under one year's service but over 20 years of age.

² Under section 4 of Lord Cardwell's Act power was given to call for volunteers from the reserves for service. Although there might not be time to get men from this source ready for embarkation at the outset, the power gives a most valuable means for providing drafts to replace casualties in the field, or to augment the strength originally sent out. See, for present law, Army Act, 1881, sect. 78, sub-s. 2, and for re-transfer, see chap. xix., sect. 3 (d).

³ Haliburton, *ul supra*.

- (b) The extension of service allowed in India to large numbers of men, which acted only as a postponement of the evil day ;
- (c) The raising of the Indian establishments in 1887 from 820 to 920 and consequent excessive influx to be followed by efflux.

All these measures, however necessary when taken, explain why drafts are now in excess of the normal. The situation is aggravated by having five regiments with both battalions abroad, and one single battalion regiment (which is in itself an anomaly) abroad also.

What must be permanently regarded as the first consideration, is the foreign army, *i.e.*, that in India and the Colonies. It has to be maintained at practically a war strength, and it is so, and is composed of men of the best age for health and efficiency. To accomplish this, while retaining the home army as a school in high discipline and training, and ready for expansion, the numerical efficiency of the latter must necessarily to some extent be sacrificed. The battalions at home cannot provide the number of men effective for immediate service that their establishments ought and would enable them to do were they not burdened with the charge of maintaining a corresponding number of battalions abroad at what is practically a war strength.

The home army has to bear the burden of its own recruits as well as those of the foreign army ; it does so under a system of properly organized battalions, not under one of comparatively useless depôts of recruits. The system entails there being in the home army a proportion of young men which is excessive as compared with the army at large ; but these have a substantial reserve behind them.

Men are enlisted from 18 upwards¹ ; this is a policy which has been forced upon the administration ; an attempt to raise the age had to be abandoned. But, while the terms of

¹ Not all are so young. In 1892, 12,118 joined at 20 and upwards, and 27,956 under 20, of whom 7,995 were turned 19.

Thus about half only of the total number were under 19.

enlistment are adapted to the circumstances of the population, and with great success in popularity though not for immediate efficiency, these terms entail noteworthy compensations. The young man trains on to become a more useful soldier or non-commissioned officer than do older men. The capacity for growth and development is great in the 18th to 20th year, and, with the good food and careful physical training which life in the army confers on the recruit, by enlisting growing lads under 20, bigger men are ultimately secured than if the same class were taken from civil life at 20.¹ Moreover the system is financially sound, for a recruit at 19 or 20 would cost more to obtain (if he could be obtained), and the extra time of retention of the average recruit at home, before he becomes eligible for foreign service,² is less costly than the increased pay which otherwise would have to be offered to the whole service.³

That physical training in the army is still capable of further improvement, in spite of the strides made, is probably true. But the results now are such that of the class called "specially enlisted" men, *i.e.*, those who are not up to the standard⁴ but are expected ultimately to reach it, an average service of nine months, to 1st January 1892, was sufficient to bring 70 per cent. of their number up to the standard.

The army at home has, however, still to a large extent to be at the pains of realizing that it is a training school, as in truth every army must be in peace time. The duty devolving on officers of arranging the drills and exercises of their men so as to develop the powers of young soldiers gradually, old and young not being treated alike, has indeed been insisted on by many committees, but it is the view and the practice within the service itself, as in other cases noticed, which lacks conviction. The legacy from former days when recruits,

¹ Parke, "Military Hygiene," 6th edit., p. 529.

² 1½ years is the average training before going to India, and it may fairly be reckoned that if enlisted at 20 a nine months' training would still be requisite.

³ Haliburton, *et supra*, para. 72.

⁴ See chap. xix. (Recruiting).

though equally young, were fewer, clings to us; it does so all the more because half the army is abroad, and because many officers, in the higher posts even, have received their training in it, altogether away from the conditions which now have to be deliberately faced at home. A careful and gradual bringing on of the younger soldiers need not check the attainment of a high standard of fitness, in marching, in carrying the full equipment, and in military training.

All the sacrifices and drawbacks referred to have been accepted in order to obtain that of which the country was so greatly in need in our last great war 40 years ago, that is, a reserve. Many ignore it because they do not see it, but it has a very substantial existence, and is paid for at the rate of some £1,300 a day. And it gives a loyal return. In 1882 11,642 were summoned to the colours, and 11,032 reported themselves. In 1878 all then existing were summoned, and 13,684 responded out of a possible 14,154. It was not to be expected that it could be otherwise.

The reserve is strong and increasing,¹ but there is need of it all. It is the maintenance of this reserve which is the vital principle of the whole system, and we cannot afford to trifle or tamper with it. It is only necessary to remember this, to recognize how idle is the complaint that such or such measures are evil because they induce men to prefer going to the reserve to remaining with the colours. It is to nurse it that the administration foregoes calling out the reserve for training, as practised by our Continental neighbours. The interference with the men's engagements would be a serious matter, and it is believed that our countrymen, after their long service in the ranks (long, compared to the Continental standard) will assuredly not have lost their cunning in four years of civil life, and that if they should be somewhat rusty they would very quickly brush up their knowledge.²

The length of service in the ranks has been extended

¹ See "Times" of 29th December, 1892.

² Steps have now been taken to secure to each reserve man a modified training during his period of reserve service.

from six years to eight, practically, since Mr. Cardwell first introduced the system, and to extend service beyond this may prove troublesome if the man's interest on his return to employment in the country, and the ultimate popularity of the system, are considered. The longer a soldier remains in the army the less inclined is he to leave it, knowing the difficulty of adapting himself to the new conditions which await him. At present the reserve men are in the full vigour of their manhood; let them retain this characteristic. Any proposal tending to raise their average age should be received with the greatest hesitation; the longer the reserve service the greater the force of any claims for pension or reward. It was, among other things, to get quit of non-effective charges for pension that short service with reserves was instituted.

Continuity and persistency in policy may be hard to attain, but must be striven for. An army without power of expansion or reinforcement, long service with estrangement from civil life, enforced abstention from marriage or the alternative of a large following of wives with each regiment but not on the establishment, ruined health from protracted exposure to bad climates, too long familiarity with the grogshops and liquors of garrison towns, and a heavy pension list, these were the baneful characteristics of our whilom army system.

It is from such conditions, from their perpetuation, or revival, that we have during twenty years of effort endeavoured, and with much success, to emerge.

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PART II.

COMPONENTS OF THE ARMY.

CHAPTER VIII.*

INFANTRY.¹

BEFORE entering on a more detailed notice of the organization and interior economy of the British infantry, it may not be considered amiss to give a very brief sketch of the development of this, the most important military arm, which has justly been termed "the backbone" of an army.

In every country the infantry is recognized as the principal arm. It is the only one that is independent of others and entirely self-contained, it is the cheapest and easiest to raise, equip, instruct, and maintain, and it can work and fight on any ground. In the days before, as well as since, the introduction of firearms, the qualities which have gained for the infantry its predominance and success have been discipline and cohesion.

In observing the progress and development of infantry we may consider three distinct periods, viz. :—

- (i) The non-fire period.
- (ii) Transition.
- (iii) Fire period.

(i) *The non-fire period.*—Students of military history are all aware how the famous Greek infantry organized in the

* The articles marked with an asterisk (*) are in principle, if not wholly, applicable to the other branches or components of the army, as well as to infantry, and are dealt with once for all in this chapter.

¹ From the Spanish *infanteria* (lat. *infans*) i.e., boy, servant; first used in the 15th century. The German foot soldiers were also called *Knechte* (servants); the Spanish, "Infanteria de la Ordenanza."

solid formation known as the phalanx, and conspicuous for its rigid discipline and perfection of drill, was succeeded by the more pliant and mobile Roman legion, the former being better adapted for defensive, and the latter for offensive purposes.

We next note the Frankish infantry, organized in massive columns, which may be said to have been seen at its best about A.D. 732, at the battle of Tours, when Charles Martel successfully drove back the Moslem invaders. With the feudal period and age of chivalry, cavalry again became the favourite and predominant arm, and for a time infantry was superseded. Under Louis VI. of France (1108–1137) who formed a militia which consisted mainly of foot soldiers and mercenaries, there was a revival of infantry, but, owing greatly to the lawlessness and want of discipline of the mercenaries, the French infantry rapidly degenerated.

A most important advance towards the development of this arm was brought about by the success and prestige of the British archers, to whose prowess the decisive victories of Crécy (1346), Poitiers (1356), and Agincourt (1415), were chiefly due, and infantry once more reasserted its superiority.

The excellence of the Swiss infantry had meanwhile begun to attract attention. At first adopting a formation akin to the phalanx, in which they fought the battle of Morgarten (1315), the Swiss gradually improved their tactics, and in an angular or wedge formation, the unarmoured peasants armed with swords, halberds, etc., charged and finally routed the Austrians at the memorable battle of Sempach (1386). Encouraged by this success, the Swiss paid renewed attention to military organization, and the renown of their infantry was for long a matter of history.

(ii) *Transition*.—The Franc-archers of Charles VII., formed about the year 1445 (whence the first standing army may be said to date¹), became famous at this, which we may call the transition period, and were succeeded by the pikemen

¹ Quaritch, *Military Library*, vol. i., p. 46.

of Louis XI., and the noted "Landsknechte" (mercenaries), who, far superior to the French infantry of the day, were largely employed by France. To Francis I. may be credited the first organization on a genuine territorial system, when he formed seven so-called legions, allotting each to a particular province.¹ In 1547 this gave place to a "band" or "battalion" formation, which was the commencement of the regimental system. Meanwhile the Spanish infantry had acquired a great reputation arising from the experience they gained in the long conflict with the Moorish invaders of Spain, who, for 700 years, had been in occupation of that country. Charles V. formed his infantry into large regiments 3,000 strong; these early became experienced in the use of fire-arms, which they discharged from rests, and their successes under the Duke of Alva in the Netherlands are well known. At the battle of Rocroi (1643) the Spanish infantry, which by then had greatly degenerated, was virtually effaced.

But the leader who did most about this period to develop the power of infantry was Gustavus Adolphus (1611). He reduced the ranks from ten to six (and even three), and developed fire effect. He got rid of armour, improved the musket and pike, and dressed his soldiers in a distinctive uniform.² The Swedish infantry, largely composed of English and Scotch, became the pattern for Europe.

(iii) *The fire period.*—Under the Great Elector and his son Frederick William I. the Prussian infantry made rapid strides, but the greatest advance in infantry organization and tactics came with Frederick the Great (1749), who formed his men in three ranks, and divided the battalion into ten companies. The bayonet (which in 1703 superseded the pike) was greatly utilized by Frederick, whose tactics consisted in rapid firing and repeated bayonet charges.³

The Seven Years' war, (1756-63) saw the creation of Light Infantry and the ascendancy of the Prussian military system, the striking feature of which was that combination of

¹ Quaritch, *Military Library*, vol. i., pp. 67, 72.

² *Ibid.*, p. 81.

³ Pratt, *Modern Tactics*, p. 227.

cohesion with pliability which had been attained by the enforcement of the strictest discipline, on a people practically uncultured. This system had in its turn to give way to the new tactics brought to such perfection by Napoleon, who, adopting a system of fire-fighting in loose order by means of *tirailleurs*, utilized the individual intelligence and enthusiasm of the soldier of the Revolution, and by a bewildering and destructive fire action, backed by the dynamic force of heavy columns, established the superiority of the new order over the Prussian linear tactics.

The French army, however, deteriorated, partly owing to the exhaustion of the better class of soldier, consequent on the long war. This resulted in an increasing reliance on the column; its formations became deeper, whilst its enemies, profiting by the lessons they had learnt, continued to improve their infantry organization and tactics. The collapse of the French columns, when opposed to the English deployed line of two ranks during the Peninsula and Waterloo campaigns is an historical fact. Since those days the employment of infantry has been vitally influenced, firstly by the introduction of the rifle, then of the breech-loader, and lastly of the magazine rifle. At the present day all the infantries of Europe are, practically, organized on the Prussian system, as perfected by the experience gained in the great wars of 1866 and 1870-71.

1. *Constitution by Regiments.*

The whole of our infantry of the line, other than the rifle regiments, is formed in territorial regiments consisting normally of two regular battalions, two militia battalions, a dépôt, and the volunteer battalions within the limits of the regimental district assigned to the regiment. The regular and militia battalions are numbered consecutively from one to four, and the volunteer battalions are, as a rule, numbered as the first, second, &c., volunteer battalion of the territorial regiment concerned. There are 67 of these territorial regiments in the British army, 45 have their

headquarters in England, 3 in Wales, 11 in Scotland, and 8 in Ireland. The Irish regiments have no volunteer battalions.

The regimental districts of these 67 territorial regiments are not numbered consecutively further than the 35th, for the following reason—

In 1872 when the "modern system" was introduced into England, as already explained, regiments which only consisted of one battalion¹ had to be linked together to make the territorial regiments. Subsequently, in 1881, in order as far as possible to preserve the old traditional numbers, it was thought advisable to give the regimental district the number borne by the senior regiment. It thus happens that although there are only 67 territorial regiments, the district numbers run up to 102, of which only the first 35 are consecutive.

In some of the territorial regiments there is only one militia battalion. This may generally be accounted for because on the first formation of the territorial regiment only one existed, and the population has not as yet admitted of an increase to the number. On the other hand, the Royal Fusiliers, and seven of the territorial regiments in Ireland, have each three militia battalions, and one has four.

With regard to the volunteer battalions they vary considerably in numbers, some territorial regiments have only one, most have two, several three, and one has eight; this variation depends partly on the number and size of the towns within a regimental district and partly on the popularity of military service in the neighbourhood.

There is one territorial regiment which consists of only one regular battalion and one militia battalion—viz., the Queen's Own Cameron Highlanders, regimental district No. 79, with headquarters at Inverness. The reason of this is that when the single battalion regiments were incorporated by pairs in 1881, there being an odd number of regiments, one had to be left single, and this was the regiment selected.

Besides these there are certain corps of infantry that have no territorial connection, or only a partial one, namely, the Foot Guards, and two rifle regiments which, though the rifles are called territorial regiments, have no regimental districts.

The Foot Guards consist of three regiments—viz., the Grenadier Guards with three battalions, the Coldstream Guards and the Scots Guards each with two battalions, all with their headquarters at the Horse Guards, Whitehall, London. The regiments of Guards are not directly connected with either the

¹ This was the case with all regiments above the 25th.

militia or the volunteers, but certain battalions of militia and volunteers belonging to the Royal Fusiliers and rifle regiments in and around London are attached to the brigade of Guards and are under the officers commanding its several regiments.

The two rifle regiments are the "King's Royal Rifle Corps" and the "Rifle Brigade," both with their headquarters at Winchester.¹ The former has four regular battalions and four militia battalions² with eleven volunteer battalions. Two of these militia battalions are in England and two in Ireland. The volunteer battalions are all in and about London.

The Rifle Brigade consists of four regular battalions and four militia battalions³ with ten volunteer battalions. Two of these militia battalions are in the immediate neighbourhood of London and two in Ireland. The volunteer battalions are all in and about London. It will be seen, therefore, that these corps have no county connection proper, although certain militia and volunteer battalions are affiliated to them and obtain their staff from them, as usual with other territorial regiments. There are two infantry corps that are local, namely the West India regiment of two battalions, and the Hong Kong battalion. Both these regiments are composed of natives officered by British officers and form part of the regular forces. (See end of this chapter.)

2. *General History of Formation of Regiments.*

In order that it may be understood how the infantry regiments of the British army have attained to their present organization, the vicissitudes of the history of their formation will be traced.

In 1660, after the Restoration, a standing army in England was first formed. Officers were commissioned to raise regiments, which, as a rule, bore their names, as Colonel the Earl of Dumbarton's Regiment of Foot, Colonel Edward Lloyd's Regiment of Foot, Colonel the Earl of Mar's Fusiliers, &c. After a time, however, many of these regiments took for their titles the names of the sovereign, the queen, or prince.

The Guards are the oldest infantry regiments in the British army. The Grenadiers were the King's Royal Regiment of Guards in 1660. The Coldstream was Colonel Monck's regiment of foot in 1650, and was made the Coldstream regiment of Foot Guards in 1670. This is the only infantry regiment of the Parliamentary army that was not disbanded at the Restoration. The Scots Guards were raised in Scotland in 1660.

The Royal Scots, which is the first territorial regiment, was originally com-

¹ As a general rule the King's Royal Rifle Corps is recruited from the northern and midland districts, London and the southern districts being reserved for the Rifle Brigade.

² These battalions are numbered from 1 to 9 omitting No. 6. This 6th militia battalion was disbanded in June, 1889, as it was unable to maintain its strength.

³ These are also numbered from 1 to 9, the 8th being omitted; the latter was disbanded in July, 1889, being unable to obtain recruits.

posed of Scotsmen, and was in the service of Sweden from 1625 to 1633, and in that of France from 1633 to 1678, when it was placed on the British establishment. It is said to have been formerly the body guard of the Scottish Kings.

Two regiments were raised for service in Tangier, one in 1661 and the other in 1680. They were called the 1st and 2nd Tangier regiments, and are now the Royal West Surrey (2nd) and Royal Lancashire (4th) territorial regiments.¹ The Buffs or the East Kent (3rd) territorial regiment was brought over from Holland, as were the Northumberland Fusiliers (5th) and the Warwickshire (6th). The Royal Fusiliers (7th) was raised from the independent companies in the Tower of London in 1685. Nearly all the other regiments formed about this time were raised in various counties and bore their Colonel's name. In 1695 the Royal Irish (18th), which was raised in Ireland from the independent companies of musketeers and pikemen, was allowed to bear the title of the Royal Regiment of Ireland. In 1714 the present Royal Welsh Fusiliers (23rd) was called the Prince of Wales' Own Royal Welsh Fusiliers. The King's Own Scottish Borderers (25th), which was raised to defend the city of Edinburgh was called the Edinburgh Regiment, and the Royal Highlanders (42nd), which was formed from the independent companies of the Black Watch in 1739 was called the Highland Regiment.

In 1751 the regiments of the line were numbered, and many of them took as title the names of the counties with which they were connected instead of their colonels' names. They did not all, however, continue to bear the same numbers as were then given to them; for instance the 50th and 51st American regiments were disbanded in 1757, and every regiment beyond the latter up to the 62nd, then the highest number, was put back two numbers. This 62nd regiment which then became the 60th regiment was raised in America, and was originally called the Royal Americans; in 1824 it was called "The Duke of York's Own Rifle Corps," and afterwards the "King's Royal Rifle Corps," which title it still bears.

In 1758 ten more regiments were formed from the 2nd battalions of the 3rd Buffs, 4th King's Own, 8th King's, 11th, 12th, 19th, 20th, 23rd Royal Welsh Fusiliers, 24th and 31st regiments, and were numbered from 61 to 70 respectively. Referring to regiments or battalions by their old numbers, now embalmed in brackets after their titles in the Army List, the 71st, 72nd, 74th, and 75th were all raised in Scotland between the years 1777 and 1787, and the 73rd was formed from the 2nd battalion of the 42nd Black Watch. The 76th and 77th were raised at Chatham and in Middlesex for service in India in 1787. In 1793-4 the 78th was raised in Scotland at Fort George, and called the Ross-shire Buffs, 79th at Stirling (and in 1804 called Cameron Highlanders), 80th in Staffordshire, 81st was the Lincoln Militia who volunteered in a body to become a regular regiment, 82nd in Yorkshire, 83rd in Ireland, 84th in York and in Lancashire, 85th in Buckinghamshire, 86th in Shropshire, 87th and 88th in Ireland, 90th, 91st, and 92nd in Scotland. The 93rd was formed from the Sutherland Fencible

¹ The regimental district numbers being 2 and 4 respectively.

Highlanders in 1800. The 94th was raised in Glasgow in 1823-4, 95th, 96th, 97th, and 98th in England, and the 99th in Lancashire. The 100th was raised in Canada in 1858; all the other regiments numbered from 101 to 109 were the old European regiments belonging to the East India Company. The Rifle Brigade was originally formed in 1800 from detachments of various regiments and was called the Rifle Corps, being armed with rifles; in 1802 it was numbered the 95th; in 1816 it dropped its number and became the Rifle Brigade.

3. *The Grouping or Linking of Battalions. Association of Militia and Volunteers with Regiments.*

From the above brief historical sketch it can be judged that when it became necessary in 1872 to link regiments together in brigade districts, which in 1881 were merged into territorial regiments of two battalions, the former history of each was carefully considered. It was not possible to link them together so that all should be restored to the counties with which they were formerly connected, as it was necessary to fit them into the various counties in accordance with the population, so that each regimental district might be able approximately to furnish a sufficient number of recruits to keep the battalions up to the established strength. Certain counties therefore with a dense population, such as Lancashire, had more regimental districts assigned to them than others, and in order properly to carry out the scheme some battalions had to be posted to those counties with which they had not had any previous connection.. This, though often unpopular, was unavoidable. It may, however, be remarked that in previous years several regiments have changed their county title. Thus the 16th called the Buckinghamshire in 1782 and the Bedfordshire in 1809, exchanged titles with the 14th; also the 39th which was called the East Middlesex in 1782 was, in 1807, changed into the Dorsetshire regiment; other cases might be cited. In order to bring the existing militia regiments into the territorial regiments in pairs of battalions they had also to be similarly considered.

Every encouragement is now given to officers leaving the regular battalions to join the militia battalions, and the adjutants and permanent staff are all taken as far as possible

from the regular battalions of the same territorial regiments. In many cases also men who have served 12 years in the regular battalions join one of the militia battalions, so it may be said that the militia and regular battalions are fully associated with one another, as they ought to be. The volunteers within the regimental district have also been brought into association with the regular battalions; the adjutants and sergeant-instructors are as a rule taken from the regular battalions, and the volunteer battalions bear the same titles and wear the same badges as the other battalions of the regiment. Where this connection is complete (which is the case except where the militia headquarters and permanent staff are not at the dépôt of the regimental district) it is much to the benefit of the service. It improves discipline, popularizes the army and thereby assists recruiting.

The organization of the volunteer infantry brigades in which so many of our volunteer battalions are grouped for tactical employment when required in the field, may here be referred to. They are formed by bringing together several battalions belonging, generally, to different neighbouring regimental districts. As, under the above circumstances, the colonels of the respective regimental districts could not command them or indeed leave their posts to do so, these brigades have been placed under the command of selected officers, from the half pay or retired list, and in some cases under distinguished volunteer officers. For interior administration and inspection, however, the several battalions remain under the colonels of their regimental districts.¹

4. *Components of the Regiment. Supply of Officers and Men.*

The component parts of a territorial regiment that are permanently embodied are (1) the dépôt which is always stationed at the headquarters of the regimental district² (2)

¹ See also chap. xxiii.

² In the case of the regiments of Foot Guards, the dépôt is at Caterham where the recruits remain until they are considered to be fit for duty with the battalions. These battalions are not sent on foreign service in peace time.

one regular battalion which is at home in quarters either in Great Britain, Ireland or the Channel Islands, and is moved from one station to another about every two years, and (3) the other regular battalion which is abroad, either in India, the tropical Colonies,¹ the Mediterranean garrisons, or in other colonies or in Egypt, and is also periodically moved from station to station. These home and foreign battalions exchange positions with one another, the battalion at home going abroad and the battalion on foreign service coming home in regular succession every 16 years or thereabouts.

Thus the system is based on the principle of one battalion at home and one abroad, but when, as now, on account of the occupation of Egypt by British troops, and increased foreign garrisons elsewhere, extra battalions are required to be sent abroad during peace time, it becomes necessary to send both battalions of the same regiment on foreign service, and the *depôt* has then to be increased. In order to provide for the accommodation and future training of these increased numbers a so-called *provisional battalion* has of late been formed at Shorncliffe to which the young soldiers are sent until they go abroad to join their respective battalions.²

The officers in the first instance are appointed from three sources—viz., (1) from the cadets at the Royal Military College Sandhurst, (2) from the lieutenants of the militia, after having passed certain examinations which are described in Chapter XVIII., and (3) from sergeants in the ranks. The lieutenants from the militia are encouraged to join the regular battalions of the same regiment, and thus establish a local county interest in the corps, but this is not insisted upon, and indeed many young officers join the militia battalions who are unconnected with the county to which the regiment belongs.

¹ There were on 1st January, 1893, 53 battalions in India and 14 in the Tropics and Mediterranean, all on a uniform establishment of 921 rank and file, and 9 in other colonies and in Egypt, on an establishment of 801 rank and file. Thus 76 in all were abroad, and 65 at home on an establishment of 721 rank and file.

² See also chap. vii.

When once appointed to the regular battalions of a regiment, the officers pass up the list and are promoted from rank to rank in the regiment in regular succession, up to major inclusive, as vacancies occur, if considered duly qualified, but for the positions of commanding a battalion and second in command, they have to be specially recommended. Officers are permitted to exchange from one regiment to another under certain regulations, and from cavalry to infantry and *vice versa* if they are not above the rank of captain. It is also open to the authorities to promote an officer from one regiment into another, if considered expedient.

The non-commissioned officers are appointed from the ranks, and the men are voluntarily enlisted into the regular battalions either direct from civil life or from the militia battalions. Men are encouraged to join their own county regiments, but there is no compulsion, and as a matter of fact the utmost latitude is permitted. The only restriction is with the militia battalions, no man being allowed to enlist into one of these unless he has a fixed residence in the county; this regulation however is very difficult to enforce, as so many men belonging to the class who now enlist move about constantly from place to place in search of work. As a rule however it may be said that the men who join the militia battalions have been born in the county and that men who enlist into the regular army from the militia, do so into the regular battalions of the same regiment; large numbers of men in a territorial regiment now belong to the county (53,000 in 1892). The supply of officers, non-commissioned officers and men to the militia battalions will be found more fully treated of in Chapter XXII.

The standards of age, height, and chest measurements that are at present required as a qualification of men for admission into the regular army are as follows:—¹

Age from 18 to 25 years for all infantry.

Foot Guards:—5 feet 9 inches and upwards with a chest measurement of 34 inches, if under 5 feet 10 inches in height, or if over, 35 inches. Other infantry:—5 feet 4 inches and

¹ The standard for the British service is above that in other countries, *e.g.*, Germany, which has at present the highest *minimum* standard for infantry amongst the great Continental powers, and takes men at 5 feet 1½ inches, and will shortly take them at 5 feet 0½ inch.

upwards with a chest measurement of 33 inches, and if over this height, the same proportion of increase as is required for the Guards.

Young men below these standards are "specially enlisted" if expected to develop.¹

* *Terms of Service.* The conditions under which commissions as officers are obtained on entering the service are described in the chapter on the supply of officers. The retirement of officers is regulated chiefly by their age; the plan adopted is a modification and alleviation of the plan proposed by Lord Penzance's committee in 1876.

Soldiers generally enlist for a term of 12 years, the first 7 of which are with the colours, if at home, with an extra year if abroad and their services be required; they are then transferred to the first class army reserve to complete their time. For the Foot Guards the engagement is 3 years with the colours and 9 years in the reserve, if preferred by the recruit to the 7 and 5 years' term.

In practice any man so desiring it, may if circumstances permit be passed into the reserve after 5 years' colour service. Sometimes the fulfilment of this term is not insisted upon.

In time of war or great emergency all soldiers can be detained for 12 months beyond their engagement. In case of imminent national danger or great emergency, the men in the reserve are called up by "proclamation"² to rejoin the colours, and must, together with all those who are serving, continue in the ranks as long as the war or emergency lasts, provided always that they are not detained beyond the term of their original engagement, that is, for 12 years, and the 12 months above referred to.

Non-commissioned officers after the expiration of one year's probation as such, and soldiers after three years' service can with the consent of their commanding officer extend their service with the colours so as to remain twelve years. Guardsmen who enlist only for three years with the colours

¹ See chap. xix.

² For operation of proclamation, see chap. xxxi.

can extend their service to seven years with the colours, and subsequently when in their 7th year to twelve years; and again, warrant officers and non-commissioned officers, after nine years' service with the colours, and privates after eleven years, may be permitted to re-engage to complete twenty-one years, after which service they obtain a pension for life according to their rank. The men who are granted this privilege are generally non-commissioned officers, bandsmen, or men with some particular regimental employment whose services it is in the interest of the army to retain. At the expiration of twenty-one years' service the commanding officer may allow a man to remain serving as long as he is "medically fit," and his services are required.

* *Systems of Promotion and Examinations.* As to the promotion of officers, see p. 131.

Non-commissioned officers are promoted by the officer commanding the battalion in which they are serving. The non-commissioned officers at the dépôt being on the same list as those of the home battalion, it becomes necessary for the officers commanding the regimental district and the home battalion to refer to one another, in case of a vacancy, for mutual concurrence; any disagreement between them is referred for decision to the general officer commanding the district in which the non-commissioned officer is serving.

In the first instance private soldiers are made lance corporals on the recommendation of their captains; and though it was the intention of Parliament in 1881 that all should be paid,¹ as a fact only a certain number are paid, and there is perhaps occasionally a tendency on the part of the captains to recommend several more men to be made than are allowed pay. These young non-commissioned officers are much used by the sergeants to ease the work of the older ones, and if they serve long in this rank without pay they get dissatisfied. Of course the more lance corporals there are the longer they are in coming on to the paid list. It is well, therefore, to limit the number; the regulations say three per company, and this number should certainly never be exceeded.

Non-commissioned officers are promoted in regular succession provided they have passed the necessary professional examination, and are recommended as efficient, but promotion

¹ The regulations have now been altered (1893). The passage above is left as originally written, as it affords an effective means of understanding the change now being carried out. Henceforward there will be a regular establishment including lance corporals, and all will be paid. Generals commanding only will have power to make a small temporary increase of lance corporals without pay, under exceptional circumstances.

to the higher ranks of colour-sergeant, quartermaster-sergeant, and sergeant-major is generally by selection.

The examination of non-commissioned officers, for promotion is (1) educational and (2) professional.¹

As to (1) Military School Certificates of Education give, so far, title to promotion, as follows:—

The qualification for corporal is, 3rd class:—equal to IV. standard in civil schools.

For sergeant, the 2nd class:—equal to V. standard in civil schools.

For sergeant-major or quartermaster-sergeant, 1st class:—equal to VII. standard in civil schools.

5. *The Regimental District Headquarters and the Work of the Dépôt.**

The Regimental District is commanded by a colonel, and he has for his adjutant a captain of the regiment who is also the adjutant of one of the militia battalions; there is a paymaster and a medical officer attached for duty, and the quartermaster of the militia performs the necessary duties of his department for the headquarters of the district and the dépôt. There is a recruiting officer who is generally the adjutant of the other militia battalion, if there is a second battalion; sometimes, however, this duty is performed by the quartermaster. In this way the services of the regular officers of the militia battalions are utilized,² whilst before 1872 they had little to do during the period of non-training. There is a warrant officer sergeant-major for the dépôt independent of the militia.

The dépôt consists of four companies, with a permanent strength as follows:—

One major who is sent from the home battalion, one captain from the foreign battalion, and two lieutenants, one from each battalion. These officers are changed every two years.

¹ See Q.R., 1892, sect. ix., para. 85.

² *Ibid*, sect. xviii., para. 7.

Quartermaster-sergeants.	Colour-sergeants.	Sergeants.	Drummers.	Corporals.	Privates.	Remarks.
1	4	4	2	10	40	{ The sergeants, drummers, and rank and file are changed every 3 years.

Officers, non-commissioned officers, and privates are specially selected by the officers commanding battalions as being suitable for the instruction and treatment of the recruit on first joining the service.

There is also attached to the depôt and posted to the companies for duty the permanent staff of the two militia battalions, consisting of—

Sergeant-majors (not warrant officers).	Quartermaster-sergeants.	Sergeant - in-structors of musketry.	Colour-sergeants.	Sergeants.	Sergeant-drummers.	Drummers.
2	2	2	16	16	2	16 ¹

There are besides three orderly room clerks, three boy office clerks, and one sergeant and two privates of the Medical Staff Corps, with one sergeant and one private of the Army Service Corps (Barrack section), who are attached for carrying on the duties connected with the regimental district, the depôt, and the militia.

A very large proportion of depôts are in detached stations by themselves, and those so placed are the most favourably situated for the purposes of their existence.

The means whereby the regimental district depôts came to be built, and their cost, has been referred to, p. 97. The change made from a system of continual marching from barrack to barrack to one of fixity of tenure in one place, has, for the depôt at least, a beneficial and deep-reaching effect, all the advan-

¹ This is the establishment for two battalions ; if there is only one battalion the permanent staff is just half this strength.

tages of which have not yet been realized, although there are many encouraging signs of regimental institutions growing up and developing as they only can do under the *quasi* guarantee of such continuance. The difference between a barrack of the Royal Marines and one of the line is very marked ; the marines having been long accustomed to permanent quarters make themselves very comfortable, and there is no reason why their example should not be followed, particularly at depôts.

The chief work of the depôt in peace time is to enlist recruits for the regiment to serve both in the regular and militia battalions, and to enter them for training and discipline as soldiers. Recruits require at first gentle treatment, more particularly now that they are, as a rule, better educated than formerly. They have probably not been accustomed in civil life to do exactly and immediately what they are told to do, and many a high-spirited lad will resent being ordered about in military fashion when he first joins. It is therefore most desirable that the officers and non-commissioned officers who are to be their first instructors should be carefully selected, and also that the recruits should be associated with selected soldiers, who will set them a good example, give them sound advice, cheerfully assist them in the work that they are called upon to perform in the barrack-rooms, and also show them how to clean, fit and arrange their arms, accoutrements and kits. It seems therefore most desirable that the recruits should join the depôt, where provision is thus made for their preliminary instruction, where they will not have to undergo the same amount of guard and fatigue duties as they would in camp or garrison ; and where more time and attention can be given to their preliminary training and well being. This more humane method has had good results.

In the original recommendation of the Localization Committee it was stated that recruits should not be in a barrack with a service battalion, and it is most desirable that this principle should be kept always in view, and the recruit receive his first training in a place where he is himself the

chief interest of his officers¹ and all concerned, and not looked down upon and treated accordingly.

The regular army and militia recruits are all put together in the barrack rooms and are treated alike in every respect except as regards drill. As only 49 working days are allowed for the training of the militia recruit he has to be pushed on quicker than his comrade of the regular army; it becomes necessary therefore to arrange the recruits in separate squads. All the squads, both of the regular and militia recruits, are taken regularly through a course, in some depôts by the same instructor, and attend the weekly lectures given by officers,² and sometimes by sergeants, on military subjects. The sergeants are responsible that the men of their respective squads thoroughly understand all that is taught them, and have to ascertain that such is the case by asking them questions. Under favourable circumstances, once a week those squads that are sufficiently advanced are marched out into the country and undergo practical instruction under one of the officers of the depôt. The squads of the regular army recruits go through a modified course of gymnastics, but there is no time to thus exercise the militia recruits during the 49 days they are under training. All, however, are instructed in the rudiments of musketry and fire 25 rounds of Morris tube ammunition. The regular army recruit, called "line recruit," remains as a rule about three months at the depôt.³

There can be no doubt that the system of training the recruits of all the battalions together under regular army officers has greatly improved the discipline and efficiency of the militia, and has done much to affiliate the battalions of the regiment, as well as improve the recruiting for the regular army. A young man who thinks he would like to become a soldier, but is not quite sure, can join the depôt as a militia recruit, as it were on trial, and at the end of 49 days he can either enlist in the regular army, remain in the militia, or purchase his discharge for £2, of which sum he gets £1 as a bounty from the government on completing his drills. It will be seen, therefore, how important it is, not only for the recruits themselves, but also for the service, that these militia recruits should be thoroughly satisfied with their treatment at the depôt. Vexatious stoppages for clothing and barrack damages, &c., should be carefully avoided.

¹ For the abolition of the old system of depôts merged in a depôt battalion, see chap. v., p. 58.

² This oral instruction by officers was first instituted for depôts by circular memorandum of April, 1889. Among other things the men are taught the history of their regiment, compiled from the record of the two old battalions or regiments of which it is composed; they are also taught the names and position of the officers, a very necessary thing with recruits, who should early be taught to recognize their leaders. This system of oral instruction has proved of much value.

³ It is a growing custom at depôts, and also with service troops, to post up in the barrack rooms a table of the "*Routine*," i.e., the succession of parades and duties for each day of the week. The practice is taken from the example of H. M. Navy; probably the Army learnt its manifest advantages from experience on passage in H. M. troopships. To be useful, the table of *Routine* must be kept up to date.

The "permanent staff" of the militia¹ are appointed from the sergeants of the regular battalions. They must have upwards of ten years' service and be suitable in all respects for the position. It is a post that is sought after by married men with families, because, except when the militia is embodied or out for the usual annual training, the permanent staff are a fixture at the dépôt. They take their share of the work in drilling and training recruits, guards, and orderly duties, with the other non-commissioned officers of the dépôt.

It is part of the duty of the sergeants who drill squads of militia recruits to point out to them the "advantages of the army" as set forth in the official notices and pamphlets, and for every man in their squad who enlists the government allowance is 1s. 6d. Some of the permanent staff sergeants are generally employed in recruiting about the district away from the regimental headquarters, and in this case the fees for obtaining recruits are higher.

As the subject of recruiting is fully treated of in Chapter XIX., it will be unnecessary to say more about it here, except to refer to the fact that the adjutants and sergeant-instructors of the volunteer battalions, who in most cases belong to the territorial regiment, ought to be the very best possible agents for recruiting, as they are more intimately acquainted with the class of civilians who generally enlist for soldiers, than any other officers or non-commissioned officers in the regimental district.

When the order has been given for the army reserve to be called up the officer commanding the regimental district, who is the commanding officer of the reservists of the territorial regiment, and who keeps their addresses and pays them,² will immediately send notices to these reservists to join the dépôt. As they arrive they are clothed, but not armed. Although it would of course be desirable to let dépôts keep all necessary material in their stores, it has hitherto been found impossible to make arrangements for their maintaining the clothing required for reservists, which is, therefore, to be supplied direct when needed from the central dépôt at Pimlico; see Chapter XXIX., where further proceedings on mobilization are described. It will be seen that after completion of the home battalions to

¹ See chap. xxii.

² The pensioners of the territorial regiment are also paid by the O.C.R.D.

war strength there will be a considerable body of men at the depôt; partly reservists and partly men untrained or unfit for active service though likely soon to become so. The militia battalions will be embodied, and will probably be ordered to march immediately either to some camp, garrison, or appointed place of concentration. The depôt companies will remain at the regimental district headquarters and prepare drafts to send to the regular and militia battalions as casualties occur.

In the event of invasion, or the coast being threatened by raiding parties, a part of the depôt companies could be organized into a battalion and ordered to join with other neighbouring depôts to repel an attack of the enemy, but their normal duty will be the preparation of drafts. This, together with recruiting, which would proceed with renewed activity, would be the principal function of the depôt in war. (See also Chapter VII., p. 97.)

6. *The work of the Home and Foreign Battalions.*

The home battalion in time of peace is, as has been already stated, quartered in one of the camps or garrison towns, either in Great Britain, Ireland, or the Channel Islands. The senior officers and non-commissioned officers are chiefly employed in the training of young soldiers, and preparing drafts for the battalion abroad; they also have to educate young officers and non-commissioned officers and fit them for promotion.

Its establishment is as follows:—

Officers	...	{	Lt.-Col.	Majors.	Cpts.	Lieuts.	2nd Lieuts.	Adjt.	Qr.Mr.	Total.
			1	3	6	8	4	1	1	24
Warrant officers		{	Sergt.-Major.		Bandmaster.					
			1		1		...	...	...	2

Non-commissioned officers... {	Q.M. sergt.	Sergt. I.M.	Colour-sergts.	O.R. sergt.	Sergt.-drummer.	12
	1	1	8	1	1	
	Sgt. pioneer.		Sergt. cook.	Sergeants.		26
	1		1	24		
Drummers and rank and file {	Drummers.	Corporals.	Orderly Room Clerk.	Privates.		737
	16	40	1	680		
Total of all ranks						801

On an average 500 of these privates are young soldiers under four years' service, who have been sent from the depôt after three months' careful drill to undergo their further military training before being sent abroad to join the foreign battalion. They usually remain with the home battalion from one to four years, during which time they are thoroughly trained as soldiers; in fact the home battalion is the school of the regiment through which all are passed.

The remainder of the privates are men with longer service, either by reason of their having extended their service to complete twelve years with the colours, or having re-engaged. No man is sent abroad who has less than four years to serve, and so it occasionally happens that some men escape being sent out to the foreign battalion with the drafts.

The men of the home battalion are called upon when in a garrison town to perform guard duties and various fatigues, but these have been much reduced of late, so as to allow more time for training.

When the battalion is in one of the large camps, such as Aldershot, Colchester, Shorncliffe, or the Curragh, these young soldiers enjoy many advantages in having less duty to perform and more practical work. The battalion being in brigade with several others, they have more opportunity of gaining military experience; they also see the other arms of the service at exercise, and take part with them in combined movements. The young officers and non-commissioned officers also have opportunities of receiving better instruction. For many years it has been the policy to increase the number of such stations where larger bodies of troops of all arms can be brought together.

It is part of the work of the home battalion to send

officers and non-commissioned officers to go through such classes or courses of instruction as are in vogue, including training as mounted infantry, as well as to find suitable non-commissioned officers and men for the dépôt.

For the question of the average condition of a home battalion on completion to war strength, see Chapter VII.

*Drafts.**—Every year between September and March, drafts are sent out to the foreign battalion, the total for the year averaging in strength 160 men: the numbers vary somewhat, being regulated according to the vacancies that are likely to occur by men being sent home to be transferred to the reserve after their eight years' colour service, or as invalids. The men selected for these drafts are the young soldiers who have been longest with the home battalion, they have generally over one and a half year's service, and are above 20 years of age¹—thoroughly trained serviceable men.

The departure of a draft is an event of importance, and a few words on the subject may come in here with advantage. The men, generally numbering over one hundred, are always inspected by the general officer commanding the district some time before they leave. Regiments pride themselves on sending their drafts away in good order and without disturbance. It is regrettable that as the drafts are necessarily unarmed and often specially clothed for the voyage, they do not make so brave a show as they otherwise would, because it is most desirable that this legitimate feeling of pride should be recognized and encouraged. Also it is only just and proper that all ranks should receive praise for their labours in successfully preparing and training men, who, though they go abroad to maintain the credit of the common regiment, still do undoubtedly denude the battalion they leave, and in which their places must shortly be filled by young recruits. The reward by due recognition and praise is here well bestowed, justly so as a matter of principle, and not merely because the system under which these drafts are perpetually

¹ No man is allowed to be sent to India who is not 20 years of age.

leaving is of comparatively recent introduction. Indeed it would be well to assume at once that the system is fully established, and that all are thoroughly accustomed to it. In this matter officers should remember that while one generation of officers passes through the army, we may reckon that three or four of men are so passing, and the memory, which depends on tradition, is affected accordingly.

The foreign battalion is the part of the territorial regiment which is kept in time of peace thoroughly efficient; all the men are well trained soldiers, and all but nine of the battalions have an establishment practically up to war strength,¹ viz. :—

Officers.	Sergt.-major.	Sergeants.	Drummers.	Rank and file.	Total all ranks.
29	1	44	16	921	1,012

Fifty-three of these battalions are in India² and ready at any time to take the field in defence of the frontier, or in any of the small expeditions that are constantly being sent against turbulent native tribes. Three battalions are in tropical colonies—viz., Ceylon, Hong Kong and the Straits Settlements, and fifteen in the Mediterranean garrisons and in Egypt, all similarly efficient and ready to take part in any small wars in which the country may be engaged. At present there are six battalions in temperate colonies whose strength is only 80 privates above that of the home battalions.

These foreign battalions are composed of well seasoned and thoroughly trained soldiers, and it may with justice be said that no finer battalions of British infantry have ever existed.

After a continuous service of eight years abroad³ the officers, non-commissioned officers and privates, under certain conditions, are permitted to join the home battalion, their

¹ For the war strength, see chap. vii.

² For estimated future establishment, see p. 103.

³ Q.R., sect. vii., paras. 831, *et seq.*, and sect. xix., para. 7.

places being taken by others from that battalion or the dépôt. This interchange of non-commissioned officers between battalions, dépôt, and, in some cases, even the permanent staff of the militia, is most beneficial, as it tends to bring all the parts of a regiment in touch with one another.

7. *The Battalion as unit.*

The battalion is the unit of the British infantry; it is divided normally into eight companies.¹ The British differs radically from the continental system, as in the latter the regiment, composed of several battalions, is treated as a whole for administrative purposes, and is usually together. Hence the regimental colonel is an important personage, while the battalion commander is in a comparatively subordinate position, all the more so as his battalion is divided into four companies, each under an officer of standing, who is responsible for the entire training of the company.

In our service the grouping of battalions in the territorial regiments is for purposes of recruitment and mutual support, but not for administration. Our battalions are generally quartered singly and maintain their individual independence under all circumstances. Although the term battalion is in an increasing degree applied to them, they are virtually the heirs of the traditions and customs of the old regiments from which they sprang.

The battalion staff consists of a lieutenant-colonel commanding, and a major who is second in command, an adjutant who is either a captain or lieutenant and who holds the appointment for five years, and a quartermaster. In time of war there is also a transport officer, a lieutenant, in addition to the company officers, and a medical officer attached.

The battalion commander has complete control of the battalion and can adopt his own system of management provided he conforms to certain rules and regulations that are issued to the army generally; he is assisted in the performance of his duties by the major who is second in command. The adjutant receives and issues the orders from the commanding officer to the battalion, he attends to the office work, registers and prepares the correspondence, keeps all the books that are required by the regulations, and makes out the returns, he also keeps the duty rosters and details the officers,

¹ Designated by letters commencing with A.

he inspects guards and escorts going on duty, and gives instruction to the non-commissioned officers and young officers; once a week he draws the money from the station paymaster and distributes it to the captains for the payment of their companies. The instruction of headquarter recruits, namely such as are enlisted at the headquarters of the battalion and also those who join from the dépôt,¹ is under him.

The second in command and occasionally the commanding officer himself, examines the company officers from time to time to ascertain that they are efficient.

The quartermaster holds the rank of lieutenant or captain and is usually promoted from the ranks; he is one of the battalion staff, his duty is to look after the barracks or camp in which the battalion is quartered; he is responsible for the cleanliness and sanitation thereof, he also has charge of all stores, clothing, equipment, provisions, arms, and ammunition, which he issues on requisition from the captains; he keeps all books and makes out all returns appertaining to these services.

The sergeant-major is a warrant officer, he receives the orders of the commanding officer through the adjutant and issues them to the various orderlies of companies, details non-commissioned officers and men for duty, "falls in" all the minor parades, and attends to the instruction of the young non-commissioned officers; in fact, he assists the adjutant generally.

8. *The Company and its Interior Organization.*

Although, as stated, the battalion is the unit, the company has ever, in our army as in others, held a position of some independence within the battalion, and its commander has been invested with special responsibility. The tendency now is undoubtedly to develop this independence and increase this responsibility. It is through the company organization that the battalion is governed, and to some extent instructed. Battalions vary somewhat as to their establishment, that of the companies varies also; generally it has 2 or 3 officers, a captain or major, and 1 or 2 subalterns, a colour-sergeant, 3 or 4 serjeants, 5 corporals, 2 drummers and from 85 to 110 privates.²

The company is divided into half companies each under the command of a subaltern,³ and four sections each in charge of a sergeant with a corporal under him. The men composing a section live and work together entirely, they occupy the same barrack room, fall in on parade and go on guard together, and also on any fatigues that may be required, always under their

¹ At home during peace time a lieutenant is appointed assistant adjutant, whose chief duty is to instruct the young soldiers who join from the dépôt in musketry; he also checks the musketry returns of the battalion.

² The privates here include lance corporals. ³ Q.R., sect. vii., para. 21.

own sergeant or corporal. The non-commissioned officers therefore have an intimate knowledge of their men, and the men not only know them, but are also known to one another, so that in times of difficulty there is mutual confidence.

The company commander regulates, under battalion rules and orders, the interior organization of the company, he attends to the comfort of his men, he sees that they are properly supplied with everything that the regulations allow, he gives them their pay and attends specially to their training, is responsible for their good behaviour, has powers of punishment for trivial offences, and brings before the battalion commander for disposal the men who are guilty of more serious ones; he is charged with the duty of knowing his subalterns' qualifications, and they are entitled to look to him for information, instruction, and advice.¹

Recruits joining from the *depôt* within a given period are posted to the same company, and so on in succession throughout the year, for instruction under their company officers, to whom they are handed over to be fully trained as soldiers.² This training is continued throughout the year as opportunities offer, but once a year each company is taken off all other duties for a month during which the whole company, officers and men together, is put through a regular course of "field training" under the company commander, who makes out his own scheme of instruction.³ On the conclusion of the course the results are tested, always by the commanding officer, sometimes also by the general commanding.

The responsibility of a company commander for the well-being of the men in barracks and their interior economy is of long standing, and is deep rooted; that for their military instruction is of more recent introduction. The orders are comprehensive, and admit of, and are intended to develop, a large amount of autonomy in the companies, but, owing to difficulties arising from circumstances, such as duties, the employments on which some of the men are at present necessarily engaged,⁴ and the small number of men in a company, a very

¹ Q.R., sect. vii., para. 17.

² *Ibid.*, sect. vii., para. 262, their training being taken up at the point where it was left off at the *depôt*.

³ Following the programme of work as set forth in Part X., Infantry Drill.

⁴ At present "necessarily engaged" because certain work has to be done, and we have not yet got the means of doing it, except in the old-fashioned way, by employing soldiers. This old fashion is an inheritance from the days of the old system of long service when there were plenty of trained soldiers available. The remedy is to have such work performed by the department of government concerned or by labour specially engaged, *e.g.*, the work of regimental postmen by the Post Office; tailoring, shoemaking, office messengers, &c., by civil or by old soldier labour, in a word by men engaged extra to the fighting establishment, which is in itself insufficient to do this work and its own besides.

constant fostering care is required to assure the attainment of a successful result. What could be done, were all ranks always present and available, becomes difficult of execution, when, from a variety of causes, such as leave, exchanges, promotion, or attendance on special courses of instruction, officers and non-commissioned officers are temporarily absent, and when the men are occupied in various duties. In practice we still adhere largely to our old methods, and the company commander is not yet what the regulations intend him to be. It may be profitable to make here some comparison between the company system, as described, and that obtaining in most armies on the Continent. Under the continental system the battalion, which has a peace strength of about 400 or 500 and a war strength of about 1,000 of all ranks, consists of four companies. Employments and duties are few. The company commander has the whole responsibility for the training of his men, and issues his own orders, and is judged by the results. The recruits join all together at a certain time of the year; very little leave is customarily given to officers, and the whole service proceeds with great regularity. It is possible to allot to each officer within the company his task: to one, the first year's recruits; to another, the older men, and so on; and to assign permanently certain seasons for certain branches of instruction, so that an inspecting officer knows exactly at any time what he should expect to see, and the commander, similarly, what he will be called on to produce.

In the training of the officers alone, in promoting self-reliance, the sense of responsibility, and the development of their characters, such a system has a distinct merit.

In our service, the foreign company system has its parallel in a battery or company of artillery in which, with its two officers of captain's grade or upwards, the presence of an officer of standing in command is always practically assured. This is a very necessary condition, but it is one which is absent in the infantry battalion, where the commands of eight companies are divided among, at least, eight captains

or majors, and any casualty among these—and such are frequent—necessitates falling back on the junior grade.

But the question of the number of companies to a battalion is not to be decided on conditions of peace training alone. The continental nations have doubtless their own reasons for giving so many as 250 men to one company commander in war; possibly the difficulty they would find in providing more officers is the cause.

In the British service we have hitherto clung tenaciously to the smaller company, and it would be felt that 250 of our bayonets and rifles would be rather thrown away, if disposed of by one commander, unless effective provision were previously made for a tactical sub-division of his command. Looking to the nature of the services on which the army is recurrently engaged, the provision of small bodies, fully officered, for tactical and other employment under all exigencies is of great importance. The term “fully officered” is used advisedly. In respect of the proportion of officers to men, the British method gives a far more satisfactory result, and one much more suitable to our needs as proved by a long and varied experience, than would the adoption of the continental plan as it stands. We may be certain that the increased and increasing development of the efficiency of the fire-arm, and of fire tactics, in which British infantry has ever been pre-eminent, does not lessen, but will increase the importance of the direction and regulation of fire, the function *par excellence* of the officer, so that a system which gives an officer to some 36 men, as with us, must by some means be retained in preference to one giving 60 men to one officer, as is commonly the case on the Continent.

National and social habits, considerations as to the source of supply of the several ranks of the army, and as to the work to be done by the army, stand for much in this question. Suffice it to say, in conclusion, that on the one hand the requirements of the training of men, and the rearing of a self-reliant class of officers points to one organization, whilst the necessity for keeping up a proper number of

officers for war, in view of our unique foreign service, has led to the maintenance of another. Perhaps if the necessity of the retention of the officers were felt to be better understood by the country and the legislature, there would be less difficulty in arriving at a solution embracing all advantages.

9.* *Administration.*

(a) *Pay* is issued by station paymasters, and no longer as formerly by regimental paymasters. The paymaster does not enter into any cash transactions with the non-commissioned officers or men, but disburses the money weekly for their payment to the captains, in cash (when his office is nearer than the bank), or by cheques. The captain sends in an estimate of the amount required in advance and a full account of its expenditure at the end of each month.¹ The captain or one of his officers pays the men; the colour-sergeant of the company is the pay-sergeant and keeps the accounts, receiving a regular allowance for this duty. The captain settles the balance of the account of every soldier in his company monthly.²

Pay has for some years been issued to the soldier weekly; it may be issued daily, but this is done rather as a punishment. So long ago as before the Peninsular war, pay was issued weekly, but payment daily was substituted on account of irregularities.

At the beginning of this century the pay of a soldier of the infantry of the line was 1s. a day, but when rations were provided 6d. a day was stopped to pay for them. When troops were sent abroad, they got less pay at some stations than at others, but a smaller charge was then made for rations, so that every man got a clear 6d. a day. The rations in Great Britain were usually provided regimentally, and it appears that owing to the increased price of living there was difficulty in obtaining the rations for 6d. a day, for we find that in 1797 an order³ was published stating that if the rations cost more than this sum the difference might be charged to the government.

In 1854 the government undertook to provide the bread and meat ration to every man for 4½d. a day, and this arrangement continued in force until 1873, when the ration was issued free.

There have been two additions of pay which are now discontinued, but which deserve to be mentioned here,—viz., 1d. a day which was allowed as “beer money” and which was discontinued in 1873, when the free ration was given; and an additional 1d. a day granted to soldiers who were in their second period of service in June, 1867, which was discontinued on 1st July, 1881, as it was contrary to our policy to encourage men to enter on a second term.

With a view to encourage good conduct a warrant was issued in 1836

¹ As has been before said, the adjutant, for convenience, receives the money for all the companies in one sum, and distributes it to the captains.

² See also chap. xvii.

³ General Order, dated War Office, 25th May, 1797.

granting a "reward of additional pay and distinguishing marks for good conduct" under certain rules. The soldier was to receive 1*d.* a day at the end of 7 years, if his conduct had been satisfactory during the last 2. It was found, however, that under these rules young soldiers on joining were not sufficiently encouraged to behave themselves well for the first three years of their service, and as it is always difficult for a man to reform his character after commencing his career badly, the grant of 1*d.* was given first after 3 years' service, and subsequently after 2 years' service. 2*d.* was given after 6 years, 3*d.* after 12 years, 4*d.* after 18 years, and 1*d.* additional after every 5 years beyond this. If a soldier's name is not entered in the defaulters' book for 14 years he is granted good conduct pay and badges 2 years earlier than above stated. These are the regulations that are now in force. Non-commissioned officers and privates of 18 years' good conduct may be recommended for a medal with a gratuity on discharge or with an annuity : this decoration was instituted in 1845.

Deferred pay was introduced on 1st April, 1876, when a warrant was issued granting additional payment for past services to non-commissioned officers and men under certain conditions, either on their discharge or transfer to the reserve. It was first fixed at a rate of 2*d.* a day, and is now calculated at £3 a year, or 5*s.* for 30 days. The title to this deferred pay accrues to soldiers as long as they serve with the colours, or in the reserve up to 12 years (as an annual payment), and to non-commissioned officers above the rank of sergeant up to 21 years' service.

Deferred pay is thus an institution suited to the conditions of the soldiers' service as inaugurated in 1870, and recent investigations show its popularity with the class it was intended to benefit. It acts as a compulsory saving to help the man to "look about him," or to make a start in life, on his transfer to the reserve.

The following table shows the principal changes and increase of pay that have taken place since the beginning of the century :—

	1800.		1867.		1872.	1876.		1881-84.	
	Rate of pay.	Deduction for rations 6 <i>d.</i>	Rate of pay.	Deduction for rations 4 <i>d.</i>	Rate of pay. No deduction.	Rate of pay.	Add deferred pay 2 <i>d.</i> a day.	Rate of pay.	Add deferred pay 2 <i>d.</i>
	<i>s.</i> <i>d.</i>	Total. <i>s.</i> <i>d.</i>	<i>s.</i> <i>d.</i>	Total. <i>s.</i> <i>d.</i>	<i>s.</i> <i>d.</i>	<i>s.</i> <i>d.</i>	Total. <i>s.</i> <i>d.</i>	<i>s.</i> <i>d.</i>	<i>s.</i> <i>d.</i>
Sergeant-major ...	2 0½	1 6½	3 4	2 11½	3 6	3 9	3 11	5 0	...
Q.M. sergeant ...	2 0½	1 6½	2 8	2 3½	2 10	2 9	2 11	4 0b	4 2
Colour-sergeant ...	...	...	2 6	2 1½	2 8	2 7	2 9	3 0	3 2
Sergeant ...	1 6½	1 0½	2 0	1 7½	2 2	2 1	2 3	2 4	2 6
Corporal ...	1 2½	0 8½	1 4	0 11½	1 6	1 4	1 6a	1 8	1 10a
Drummer ...	1 1½	0 7½	1 0	0 8½	1 3	1 1	1 3a	1 1	1 3a
Private ...	1 0	0 6	1 0	0 7½	1 2	1 0	1 2a	1 0	1 2a

a If in first term of service. b Increased in 1884.

N.B.—Soldiers have always had to pay for extra messing out of these rates of pay.

The pay of the first class army reserve man is 4*d.* a day, issued quarterly in arrear, *plus* 2*d.* a day deferred pay issued at the end of each financial year, His pay is remitted to him from the depôt of his regiment.

(*b*) *System of messing.*—In peace-time the usual ration for the soldier is $\frac{1}{2}$ lb. of meat, either beef or mutton, including bone, and 1 lb. of bread. These rations are issued daily by messes to the companies' orderlies in the presence of the subaltern on duty. The number of men per mess, which in the infantry is usually the number that each barrack room contains, is given each morning to the quartermaster, and the meat is weighed out in messes from these returns. Cooking is under the direction of a sergeant cook, who must have obtained a certificate from the School of Cookery at Aldershot. It is necessary to have besides these rations, vegetables, flour, groceries, milk, &c., to prepare the various meals; such articles are not allowed by government, and have to be bought. For this purpose each man in mess is charged in his accounts a sum not exceeding a fixed amount, in the infantry usually 3*d.* a day, which is formed into a fund in each company for the purchase of these articles. The sergeants mess together in a separate mess.

In *war time* free rations are issued, including groceries and all supplies which can be obtained.

It is an essential principle that for quality of the supplies, the commanding officer and his officers are responsible. The quartermaster sees to the quantities and the departmental issuer may assist to see that regulations are observed and check irregularities, but beyond this it is on the officers that all responsibility for quality lies, and they are themselves to be judges; moreover, they are not to wait for complaints, but are to watch and observe with extreme vigilance that there should be no cause for complaint, not only as to the food as cooked, but as regards the supply of every kind; for this purpose a very valuable book¹ on meat inspection has been issued, which every officer should study. The terms of all contracts should be hung up in a conspicuous place in the orderly room or elsewhere. The action of the commanding officer himself is the most potent factor in insuring that the troops get that to which they are entitled. Vigilant inspection is the sole corrective to that system of lowest tender contracts, which experience has shown can alone be adopted with contracts of this nature.

Of late there have been lectures given and classes formed to give instruction to officers and non-commissioned officers in the method of judging meat, and attention has been closely drawn to messing and cooking; the results have been most successful, and the soldiers' messing has consequently been much improved.

(*c*) *Clothing.*—To the lay mind clothing implies both the outer garments and the inner, such as shirts, but in the army the term has a technical signification; the outer garments are "clothing," and the shirts, &c., come under the head of "necessaries." Clothing then is the technical term for the man's head-dress, tunic, frock, trousers or kilt, leggings, and boots; it is the property of the State, and is returned by the man when done with, and sold.

¹ "Meat Inspection." Price 1*s.* 6*d.*

Clothing is issued for the most part annually on the 1st April.¹ Formerly, until 1st April, 1881, the clothing, when issued, became the property of the soldier. Within recent years, two systems have been known to the service. Under the present system there is some disadvantage in the absence of inducement to keep the clothing in good order, whilst under the old system, when it was the soldier's property, there was some inconvenience from the vested right of the man in the garments, and this constituted a hindrance to his employment on work which would wear it out sooner than usual.

Clothing is supplied, except in India, by the Army Clothing Department, which has a factory at Pimlico, London. At the proper time the men are measured, size rolls are made out and sent to Pimlico, and the clothing is issued in the sizes as demanded. The sergeant master-tailor, a qualified tradesman, fits the garments on the men, employing soldiers from the ranks as tailors, and paying them for their work.

Soldiers serving in the Mediterranean and some foreign stations, have lighter clothing issued to them, and in some cases, such as in Hong Kong, the Straits Settlements, and Ceylon, the troops have three white cotton frocks, and three white cotton pairs of trousers issued as clothing instead of a tunic and tweed trousers. In India the clothing consists of a tunic and serge frock issued alternate years, and a pair of serge trousers every year, in addition to which an allowance is issued, on which each soldier is required to keep up three suits of American drill. This cotton cloth suit is dyed for active service, to a workmanlike earth colour, and then constitutes the famous and well known "*Khaki rung*"² uniform, in which so much good work has been done.

(*d*) *Necessaries*.—Necessaries comprise shirts, socks, brushes, &c., which the recruit receives free on joining, under the name of a "free kit," and subsequently keeps up at his own expense.

(*e*) *Sea-kits*.—On embarkation for stations abroad soldiers are given what is called a "sea-kit," containing articles for use during the voyage, such as a bag, flannel belts, worsted cap, a blue serge or khaki frock and trousers, soap, &c.

(*f*) *Equipment*.—This is a technical term in the army. It applies to the articles such as arms, valises and belts, ammunition pouches, etc., which are issued by the Ordnance Store Department to the commanding officer of the battalion or unit, according to its establishment. It also embraces the other articles supplied from the same source, such as tools, transport wagons, or carts, which are borne on the "equipment ledger."

Thus "equipment" is held in trust by the unit, and hence a soldier, when transferred to another accounting unit, usually goes without the equipment of which he may have been in charge, unless, indeed, it is specially transferred with him.

(*g*) *Special arrangements for Active service*.—When soldiers are em-

¹ An alteration in the system of issue, &c., of clothing will probably be made this year, 1893.

² *Khaki rung*, lit: dust-colour.

ployed in expeditions abroad, such as in Egypt or other parts of Africa, they are generally provided with a special dress which has been issued to them free of charge, but in the event of mobilization for war in Europe, the army would probably be clothed in its ordinary marching-order dress. When the reservist joins the depôt he will be provided with two kersey frocks instead of a tunic and one frock, in other respects he will be clothed exactly as the men in the battalion. All the tunics of the men in the battalion are also given into store, and a field-kit, consisting of a worsted cap, clasp knife, tin of grease (for the boots), and a housewife is issued to every soldier taking the field, free of charge. The following articles are taken in the battalion store wagons as a reserve :—100 pairs of boots, a shoemaker's tool chest, and 28 lbs. of soap.

Thus the army is thoroughly habituated to change its garb to suit the service or the climate. This should be well understood by all, so that loosening of dress should carry with it no loosening of discipline.

(h) *Arrangements for sick*.—At every military station there is a hospital which is provided with all the necessary requirements appertaining thereto. To each hospital there is appointed one or two medical officers, and non-commissioned officers, and privates belonging to the Medical Staff Corps.¹ When a man is admitted as a patient, he is given hospital clothes. There are in many hospitals reading rooms, and grounds in which those that are convalescent can walk about; their friends can visit them at certain hours.

If any man is dangerously ill a communication is at once sent to his friends. In many hospitals the regimental canteen supplies note paper and envelopes free, to enable men to write to their friends; and the hospital wardmaster, who issues the paper, stamps the letter and charges the man's account. Thus a 24-hours' or more delay in getting paper or stamps from the man's company is saved.

During the time a man is in hospital he has 7*d.* a day stopped from his pay. In wartime these regulations are modified; the men generally have to wear their uniform, and have to take with them their arms and equipment.

10. *Instruction of the soldier.* (1) *Obligatory.*

(a) *Drill*.—The two and a-half months' training for the regular recruit, or the 49 days allowed for the militia recruit, is designed to enable him to take his place in the ranks after he joins the home or militia battalion of his regiment.

Too much care cannot be given to the first drilling and setting up a recruit receives. It must not be slurred over; we can hardly tell how much a man's sense of discipline and his "morale," if not his actual morals, are affected through the manner in which his early drill is—first—taught, and—secondly—learnt.

(b) *Musketry*.—This is the term applied to the course of instruction which is of the greatest importance to the infantry soldier, as it is designed to teach him to shoot. 200 rounds are allowed for the so-called

¹ See chap. xv. for Medical Staff Corps.

"recruits' course" and 200 rounds for the "trained soldiers' " annual course. The trained soldiers' course, like the recruits' course, is at prescribed ranges, so far as the first 126 rounds are concerned, but the rest of it is more practical, and is arranged by the battalion commander, who, as long as he observes certain regulations, may order the companies to be exercised as he thinks fit—viz., at "field firing," "long range volleys," "skirmishing," and other fire discipline practices at targets representing an enemy. He can cause each man to expend 64 rounds in these practices.¹

Besides this, 1,200 rounds can be expended by each battalion under the orders of the general officer commanding the district or station in any exercise he may think fit to order.²

(c) *Company Field Training*.—Every year, during the drill season if possible, two companies at a time are struck off duty to undergo what is called a course of "field training" under its officers. Six days previous to the commencement of the course, the non-commissioned officers of the companies are specially instructed and examined in map-making and reading, and practised in finding the way from one place to another by aid of a map. The course in which the companies are exercised occupies eighteen working days, and the subjects are briefly as follows:—"fire discipline," "advance and rear guards," "working parties," "reconnoitring," "outpost duties," "camping," etc. The captain is permitted to vary the course somewhat, if it seems expedient to him to do so. In the afternoon he gives a lecture to explain the next day's work and its object. At the end of the course the companies are examined by the battalion commander, and sometimes by the general officer commanding the district.

(d) *Gymnasium*.—In most garrisons there exists a gymnasium. Recruits are exercised therein for 1½ hours daily in simple exercises. Trained soldiers have a more extended course, attending every alternate day for one hour for a course which lasts three months. Besides this, battalions are exercised in "running drill." They run 300 yards at first, increasing to 1,000 yards.

(2) *Optional and Special Instruction.*

(e) *School*.—At nearly every camp or garrison, and at most depôts there is established an army school. The object of these schools is to afford the soldier the opportunity of improving himself, and to assist those who are desirous of promotion in obtaining the necessary certificates. The hours at which the school is open vary, but the most generally popular time is in the evening. All non-commissioned officers and boys under eighteen years of age who have not got 2nd class school certificates are obliged to attend, but with the men attendance is voluntary. Commanding officers, however, are enjoined to encourage as many as have not educational certificates to attend, so that even if they do not wish to become non-commissioned officers they

¹ The 10 remaining rounds are used for individual practice or match shooting.

² Money prizes are given to the best shots in individual firing and also to the best sections in field firing.

may be able to derive full benefit from the various libraries and reading rooms that have been established in every barrack for their recreation. There are no fees for attendance.

(f) *Field Sketching*.—In every battalion classes are formed during the winter months for the instruction of non-commissioned officers in field sketching. The instructors are officers selected by the commanding officer. A small supply of instruments for this purpose is provided by the government.

(g) *Fortification*.—When opportunity offers, battalions or companies are called upon to go through a short course of instruction in field works. The course lasts eleven working days and consists of making a field redoubt, constructing obstacles, making gabions, fascines, &c., and escalading. There are also classes formed three times a year at the School of Military Engineering at Chatham, for the purpose of instructing a limited number of non-commissioned officers of infantry in field works, who qualify themselves as assistant instructors.

(h) *Gun Drill*.—A certain number of infantry soldiers are instructed from time to time in "gun drill." In some garrisons should there not be a sufficient number of artillerymen to man all the guns, infantry soldiers may be, and sometimes are, called upon to assist in this duty.

(i) *Signalling*.—In every battalion there are, besides one officer instructor, two non-commissioned officer assistant instructors in signalling,¹ who must have obtained certificates of qualification from the School of Army Signalling at Aldershot, or from one of the three Presidency schools in India. During the summer months classes are formed consisting of one officer and nine rank and file. Each battalion must have six qualified signallers, and in the autumn of every year the inspector of army signalling inspects them and reports on their proficiency or otherwise.

(k) *Pioneer Class*.—In peace time there are ten pioneers to a battalion under the charge of a sergeant; in war time the number is increased to eighteen. This sergeant must have a certificate from the School of Military Engineering at Chatham. The pioneers of the battalion form a small body of artificers competent to execute simple repairs to the barracks and any other minor work required by the battalion. They are selected according to their trades; carpenters, stonemasons, bricklayers, and smiths being found the most useful. A smith can on application be placed, until competent to shoe horses, under the farriers of any cavalry regiment.

(l) *Transport Duties*.—In order to provide an adequately trained *personnel* for the regimental transport of a battalion, certain battalions are given a few horses and wagons to form the nucleus of their regimental transport. They are employed on regimental work or the duties of the station under the superintendence of an officer of the battalion trained to these duties, with a small staff of non-commissioned officers and men. As opportunities admit, men of the battalion are taught riding and driving with the Army Service Corps or their own regiments, and their names borne on the books as "instructed men." Each driver receives two pairs of drawers, a pair of pantaloons and a pair of "putties."

¹ One only is paid 6d. a day, see Pay Warrant, art. 691.

(m) *Mounted Infantry*.—Battalions at home are called upon in turn to send one officer, two sergeants, one corporal and thirty privates to Aldershot or the Curragh to be instructed in the duties of mounted infantry. The men selected for this service must be thoroughly trained in musketry and good shots. After they have been through a course, which lasts for ten weeks, they return to their battalions and are available for employment in case of war.¹

(n) *Stretcher Bearers and Ambulance*.—Two men in every company must be trained as "stretcher bearers" and "in rendering first aid to the wounded." A non-commissioned officer is also detailed to take charge of them when their services are required. Instruction is given in these duties by the medical officers of the districts. Classes are formed occasionally, the course consisting of twelve lectures and drills. All trained regimental stretcher bearers are required to attend at least four stretcher drills annually. In several stations, both officers and men are encouraged to attend the valuable courses of instruction in "first aid to the injured" (including stretcher drill) which are given under the auspices of the St. John Ambulance Association.²

11. *Arms, Ammunition, and Equipment.*

A rifle and full equipment are on charge of the battalion for each sergeant and rank and file, except the band and pioneers, according to the establishment, and these arms are numbered as belonging to the battalion (see p. 152). The sergeant-major has one pistol for instructing the staff sergeants, who in war time are thus armed.

The companies at the dépôt are supplied with an extra number of unserviceable rifles marked D.P., for drill purposes only, with which to train the recruits.

Some infantry battalions have a machine gun in charge, and in each battalion certain officers and non-commissioned officers are instructed in the use of these weapons. Ball cartridges at the rate of 20 rounds per rifle are issued to each battalion, independently of ammunition for practice. All the ammunition is kept in the regimental magazine, and only guards and escorts carry ball ammunition in their pouches in peace time; 20 rounds are served out to them when going on duty, and they return it into the magazine when the duty is completed.

¹ See chap. ix.

² The Ambulance Department of the Order of the Hospital of St. John of Jerusalem in England. Headquarters, St. John's Gate, Clerkenwell, E.C.

Rifles and equipment to complete the home battalion to war establishment are kept at the place of mobilization in charge of the Ordnance Store Department, and are issued to the officer commanding the battalion there stationed when the order goes forth to mobilize.

There are at each depôt 500 stands of arms and equipment kept in reserve for the purpose of issue to the depôt when it is increased on mobilization by the surplus reservists and young soldiers (see p. 139).

The ammunition provided per rifle in the field is as follows:—

100 rounds carried by the soldier.

65	„	„	in the small-arms ammunition	} Battalion reserve.
	carts, ¹	or on the mules	.. .. .
20	rounds in the battalion baggage wagons	..		

Total 185

This is issued to the battalion commander on his requisition at the “place where the second regimental equipment is kept,” as is mentioned later.

The British infantry is equipped with what is called the “valise equipment.” This consists of a valise or bag carried on the back which contains the “field kit” together with 20 rounds of ammunition; it is attachable to the straps (called braces) which are on the body of the soldier, passing over his shoulders and fastened to a belt round his waist. The great-coat is carried on the waist-belt or worn on the person, the mess-tin is carried between the valise and the coat, and the two pouches, which will contain eighty rounds of ammunition, are fastened to the waist-belt in front; a haversack and a water bottle, worn over the shoulders with separate straps, and a pair of leggings, complete each man’s “turn out.”

50 per cent. of the men carry intrenching implements, namely, a small spade, the handle of which forms a pick. The weight of the entire equipment including the rifle and 100 rounds of ammunition is about 50 lbs. Most of these articles can be detached, or worn separately, as the circumstances of the service on which the soldier is employed may require.

The Magazine Rifle.—The arm is the Lee-Metford; it is a bolt-action, small-bore, magazine rifle, sighted from 200 to 2,900 yards.

The great object to be obtained in a military rifle is to have the trajectory as flat as possible, so that an error in sighting should not be of much consequence, especially at medium and decisive ranges. To this end it must have a high muzzle velocity, which can only be given by increasing the power of the explosive in proportion to the size of the bullet.

To give the Martini-Henry bullet the required muzzle velocity, it would be necessary to increase the charge of powder to such an extent that the barrel

¹ The ammunition is packed in specially made boxes in the carts; each S.A. Ammunition Box, Mark XIV. contains 1,100 rounds of cordite ammunition and weighs 76 lb. 10 oz. (See § 6785 “List of changes,” &c.)

would have to be made much thicker at the breech, and consequently the rifle would be heavier; besides, the recoil, which is always a great detriment to accurate shooting, would be thereby considerably increased. It therefore became necessary to reduce the diameter of the bullet and make it smaller, which means a small-bore rifle. There is a point beyond which it is not advisable to go in this direction, as the bullet must have sufficient destructive power, and also must not be so light as to be unduly deviated from its course by wind.

The Lee-Metford rifle, which has a bore of .303 of an inch and carries a bullet 1.25 inch long, weighing 215 grains Av., seems to fulfil these requirements. The rifle shoots with great accuracy, and at 500 yards distance the culminating or highest point of the trajectory easily covers a man standing. The rifle can be used as a single loader, and at the same time has a store of ten cartridges in the magazine, to use at a crisis, such as a cavalry charge, in the final stages of the attack or defence, or a sudden rush of savages. The weight of the rifle is 9 lbs. 10 ozs. and it has a sword-blade bayonet 12 inches long; the muzzle velocity is 2,000 feet per second, and there is little or no recoil. The bullet is composed of lead and antimony, with an envelope of copper and nickel; the explosive is called *Cordite*, which when exploded is smokeless; 10 rounds of such ammunition weigh 10 ozs. Both the rifle and the ammunition seem to be thoroughly satisfactory.

12.* *Regimental Transport.*

The regimental transport on service is for the purpose of carrying intrenching tools, ammunition, officers' baggage, spare boots, clothing materials, and all camp requisites besides two days' rations¹ for the battalion. When the troops halt, the wagons are available for use under the director of transport in bringing up provisions, &c. to the front.

The transport allowed to a battalion that takes the field for home defence is 5 carts (1 for intrenching tools and 4 for ammunition²), and 4 wagons (each drawn by four horses), 30 horses, 2 mules for ammunition, and 17 drivers. A subaltern is appointed transport officer and he has a sergeant under him; both are mounted on government horses. For service abroad 11 wagons are allowed including 3 for tents when needed. This necessitates an increase of horses and drivers to 58 and 32 respectively. There is also another mule allowed for medical panniers.

¹ Viz.:—One day's current and one day's preserved ration besides an extra day's grocery ration; also the man carries the unexpended part of his day's ration and an emergency ration on his person (Field Army Establishments, p. 10).

² With regard to the ammunition supply it may be said that the British allowance, namely 65 rounds per man, carried in the four battalions' carts is more than is provided for by any other nation.

The wagons, harness, &c., in excess of what the battalion may have in peace, are issued on mobilization from the stores where the 1st and 2nd regimental equipment are kept, and are taken charge of by the staff trained to transport duty within the battalion.

It is difficult to compare the regimental transport of the British infantry with that of the armies on the continent as there all the battalions forming the regiment (generally three in number) march together, and the regimental transport is for all of them—whereas in our service the transport as above given is for one battalion only. In continental armies, the regiments generally, having more or less permanent quarters, are in charge of the whole plant of wagons, &c. at all times, and mobilization is thereby facilitated.

The transport for the purpose of carrying officers' baggage, camp equipment, and a day's provisions is much the same as ours, but the numbers of vehicles depend on their capacity. The Austrians have only two-horse wagons (a few with three horses abreast), and these light wagons are probably an economy besides shortening the column. In Austria the regimental transport is classified in such a way¹ as to facilitate very much the orders for a march, inasmuch as part of it carries what is of immediate necessity in any engagement, and part is merely baggage which need only follow on. This common-sense arrangement is well worthy of imitation, and such a classification should become regulation and be observed in all tables for the other arms, as well as for infantry, so that the troops should be aware of it. At

¹ The classification in the Austrian Infantry is for the regiment of 4 battalions :—

16	2-horse company ammunition wagons	..	Troop column.
2	„ private sutler's wagons	.. ..	} Fighting train.
8	„ wagons for meat transport (2 per battalion)	.. ..
2	2-horse equipment wagons for regimental head quarters	.. ..	} Baggage train.
8	2-horse equipment wagons (1 for every 2 companies)	.. ..
12	2-horse supply wagons	.. ..	Supply column.

Total 48 wagons.

present it is only referred to academically in Colonel Rothwell's "Lectures on Staff Duties, 1890," page 153, and nowhere else, and not being regulation is ignored. It would be well if at Kriegsspiel (war game) the fighting train at least were always on the board.

13. *Mobilization.*

(a) When a battalion is mobilized for *home defence* it will form part of the army corps, division, or brigade to which the station it is in at the time is told off. The battalion receives at the station where it is quartered its complement of army reserve men from the dépôt, and the extra arms and equipment necessary to complete its numbers to war establishment, as well as its cooking utensils and intrenching tools, and the vehicles in which they are carried, the harness, saddlery, &c., all called the first regimental equipment, and kept ready at the ordnance store for the station. The procedure as to obtaining horses and drawing the second regimental equipment is shown in Chapter XXIX. (mobilization) and in the "Mobilization Regulations."

To one battalion in each brigade there is attached a machine gun detachment, consisting of one officer, one sergeant, and from eleven to sixteen rank and file, with two machine guns either drawn on wheels by eight horses or carried on eight pack animals. These men belong to the battalion but are in excess of the ordinary field establishment. As a tactical unit these guns are under the direct orders of the general commanding the brigade.

(b) *Mobilization of the Foreign Battalion.*—As has been before said the peace establishment of all the battalions serving in the Mediterranean, India, and the East, is nearly equal to that of war establishment. They would not, therefore, require many men to complete them (6 sergeants and 79 rank and file is the actual increase). If ordered to be mobilized, it would be necessary to prepare a draft at the dépôt, to embark to join the foreign battalion. This would be composed of reservists. The transport and

equipment suitable to the country in which the troops were intended to operate, would go with them or be collected at the base of operations.

Infantry in Brigade and Division.¹

The detailed composition of the various units—viz., the brigade, division, and army corps, will be found in the tables in appendix in connection with Chapter XXVIII. It may be stated here that a brigade of infantry (as of any other arm, *i.e.*, cavalry) is composed of that description of troops only, with such accessory establishments as are necessary for its maintenance.

Brigade.—An infantry brigade consists usually of four battalions with a detachment of machine guns, on wheeled carriages. A major-general commands, with his staff of a brigade major and aide-de-camp; and, attached, are a company of army service corps for the service of supply and carriage of baggage, and a bearer company to attend on the sick and wounded. When the brigade is in camp or marching there is a field officer of the day, who has command of the guards and picquets. The outposts and advanced guard duties are usually taken by battalions in turn.

Division.—The division is the smallest unit in which the different arms of the service find their place side by side, *i.e.*, infantry, cavalry, artillery, and engineers. Its composition as to fighting troops is usually 2 brigades of infantry as above, and besides, a squadron of cavalry, three batteries of field artillery (forming a brigade division under a lieut.-colonel), an ammunition column (also under the artillery), and a field company of engineers. It has attached to it a company of army service corps, and a field hospital establishment. The whole is commanded by a lieutenant-general, whose chief staff officer is an assistant adjutant-general.

The service of the army in the field, particularly as to outposts and guards, is usually done by brigades.

14.* *Inspection.*

Unlike the cavalry, the artillery, and the engineers, which are inspected as to technical efficiency by general officers of their several branches, the infantry look for their inspections to the general commanding the brigade or command in which the unit finds itself.

The inspection is an annual one. It is directed first to the well-being of the battalion in quarters, and the management by the commanding officer, regimental staff, and company officers, each so far as their sphere extends.

¹ See Tables in the appendix.

Everything relating to housing, clothing, feeding, book-keeping, including pay, accounts, and all that is called "interior economy" is brought under review. If there is anything in the customs of the regiment, on which so much depends, which is inimical to good order, or is a shortcoming, it should then come to notice. Similarly if there are good customs springing up, they may be noted and their observance propagated elsewhere.

The inspection is directed, secondly, to the technical duties of the infantry arm, the style and correctness of drill, the efficacy of the instruction given to the battalion in field manoeuvre, and in outpost and analogous duties, and also to proficiency in shooting (musketry). The capacity of the non-commissioned officers is watched, and that of the officers in every respect tested and reported on. On these reports the future advancement of the officer depends.

The formal inspection necessarily occupies more than one day, but *inspection* has a wider interpretation. A corps under the command of a general officer is said to be under his "inspection and advice," functions which he exercises as often as he has the opportunity, and, with improving facilities of communication, the opportunities tend to increase. Some of the important results of inspections are indirect, *i.e.*, work done in expectation of what will be called for. It will be seen from this review how very much depends on the mode in which inspections are conducted, and the spirit in which they are received.

15.* *Annual Manœuvres and Field Training.*

The object of all the drill and training that the soldier undergoes is to make him fit to take the field before an enemy. The primary instruction is carried out by the infantry on their drill grounds, but it is most necessary that the troops should be trained to work across a country, and further be brought together for combined manoeuvring during peace time; indeed it is essential for success in modern warfare. The great difficulty in England has always been to obtain suitable ground for thus exercising the troops. The country selected should be varied by hills and woods with open and enclosed lands, so that every tactical experience may be gained by officers and men of all arms of the service. It must cover a considerable area, so as to allow space to admit of practical manoeuvring and, moreover, it

should be in different parts of the country, from year to year, so that the officers employed may gain fresh experience. Nearly every year a part of the army at home is thus exercised, but only a part, and many officers remain who get no opportunity of sharing in manœuvres or practising the leading of troops, while many units get little work beyond their barrack exercises. Owing partly to the location of the barracks, which have to be occupied whether conveniently situated for instruction or not, the assembly of large bodies of the three arms is impeded; but, though a universal adoption of the annual manœuvre system may be beyond reach, its partial realization is still a great gain. Failing larger opportunities, operations in enclosed country, and even by one arm alone, have been found beneficial in stimulating military interest and knowledge. It is only by taking trouble—often through the initiative of officers—that the object of securing the advantage of field operations of some kind to all units can probably be best attained. Through a careful adaptation of means the need for expenditure of large sums of money can sometimes be avoided. In India manœuvring camps are annually formed in each of the Presidencies, and it is quite the exception if a British battalion misses attending one or other of them.

At home we made a good beginning with field manœuvres on the introduction of the modern system in 1871–2, but in subsequent years a recurrence of minor wars intervened; later, the resumption of manœuvres became essential.

The armies on the Continent are trained at manœuvres every autumn, and generally this instruction is given to every fraction of troops in each country. The generals in command have the disposal of a certain sum, and each makes his own scheme for the manœuvres in his district. The manœuvres follow on the instruction which each arm receives by itself in work in the open during the season. In every garrison the companies may be seen at an early hour marching long distances into the country for field exercises. For the actual manœuvres the brigades are assembled and exercised often one against the other, then the divisions, and lastly, perhaps, the army corps. The Prussian army was the first to set the example of this system. Other countries, warned by the experience of the desperate slaughter and suicidal defeat to which troops are exposed who are led by officers untrained to field operations, have all followed suit. In Germany, when they have

money enough or circumstances admit, reserves may be called up, and the troops, more or less, have war equipments, but this is the exception; the main point is that all should in some way be manœuvred. The troops are usually quartered in the villages and march long distances to reach them. On one or more nights of the (say) six, that the operations last, the troops bivouac surrounded by straw shelters.

The large open spaces on the continent of Europe and in India, greatly facilitate the opportunities of practical manœuvring in comparison with the enclosed country of Great Britain and Ireland. There are, however, some open spaces here and there, ground not different from that on which, in the event of an invasion, engagements might take place, and it would be quite possible to arrange very instructive manœuvres in different parts of the kingdom. In Europe these manœuvres take place immediately after harvest, so that as little damage may be done as possible to the crops, and the farmers are compensated for any real injury that may have been caused by the troops passing over them. In India the manœuvres take place during the cold weather, but the crops are then always off the land.

Money spent in affording to our troops the valuable experience which can alone be gained from field manœuvres is money well spent, and it is satisfactory to observe the progress which has recently been made in giving them this experience.

16.* *Regimental Institutes.*

Within the last few years several new barracks have been erected in this country which for comfort, convenience, and sanitation present a remarkable improvement on the old ones, and are much appreciated by both officers and men. The policy is generally to construct them at the larger stations, as at Aldershot and the Curragh, to facilitate the assemblage of all arms of the service together for tactical training.

There are no men in the class of life from which soldiers are drawn who are so well accommodated as they are. The rooms are warm and comfortable, there are good ablution rooms and baths, each man has a clean bed with plenty of blankets in cold weather, three meals a day, and very frequent amusement provided for him.

There are many old barracks still extant, but a considerable sum has been expended of late with the object of completing them in modern requirements.

Under the term "regimental institutes" are embraced, under one management, what existed previously, and

notably since about 1865, under the names of regimental canteen and grocery shop, recreation room, and library.

In every barrack there are rooms set apart for the "regimental institute," which represents what in civil life would be called a club. Its object is to supply the soldier with almost everything he may require at moderate prices, and to provide for his recreation and amusement. This institute is divided into two branches:—

1st.—The refreshment department, including the canteen for beer, the coffee-room for light refreshment, and the shop at which groceries and other articles can be purchased—each separate from the others.

2nd.—The recreation department, which embraces reading-rooms (sometimes with billiard tables attached), libraries, skittle alleys, shooting galleries, theatre, &c.

This institute is under the direct supervision and management of a committee of officers appointed by the commanding officer. The second in command is generally the president with two captains (if possible) as members; besides this there is a sub-committee of three non-commissioned officers. There is a steward, who is (if possible) a pensioner (generally some old colour-sergeant or quartermaster-sergeant who has been formerly in the regiment), he is assisted by other pensioners if they can be procured, or if not, by soldiers from the ranks to act as waiters and shopmen. Any soldier or his wife may deal at the regimental shop, but to enter the recreation rooms a small monthly subscription, not exceeding 6*d.* for sergeants, 4*d.* for corporals, and 3*d.* for privates, is exacted. The reading rooms are provided with newspapers, periodicals, and magazines, and attached to them generally is a circulating library belonging to government. Writing tables with pens, ink, and paper (free of charge), are usually also provided, and the rooms are comfortably furnished. Hot coffee in the early morning, soup¹ and supper in the evening, can be procured at a very moderate charge.

The canteen is a "well conducted beer shop,"² and as such, it must of course be worked so as to produce a profit. This is very jealously watched, and the fund so raised applied in aid of other branches of the institute, and also in the support of games and sports, and other objects of approved utility for the men at large; (see p. 152 as to application of this fund in aiding the comfort and convenience of the sick in hospital—a worthy object).

In fact the army, without knowing it, has been for nearly 30 years in the enjoyment of what, it is believed, is best known to the public as the "Gothenburg system," under which the profits by the sale of liquor are employed, under careful supervision, for the good of the community. There is hardly any detachment station, however small, where the officers do not manage to establish a canteen for the men, usually as a branch from the parent institution.

The fund arising from canteen profits is very usefully applied in supple-

¹ In some regiments soup is given free of charge.

² Mr. Childers' definition in 1882, during his ministry, when directing the separation of the *canteen* from the *grocery shop*.

menting the subscriptions which officers make to further regimental sports. The favourite games of the British soldier are cricket and football. Every battalion has clubs to which many belong. The men usually pay a small subscription, and an officer is appointed to take charge of the funds. Under ordinary circumstances a day is fixed, frequently on the anniversary of some action in which the corps has borne a prominent part, for what are called "regimental sports." These consist of all sorts of athletic exercises, such as running, jumping, lifting weights, putting shot, and turning out in marching order, for which prizes are given. There are usually a number of competitors for each event, and this meeting is looked forward to with considerable interest.

17.* *Employment in Trades.*

In the new barracks provision has been made for regimental workshops, not only to enable the pioneers to carry on their trades, but also with a view to inducing soldiers in the ranks to assist them, or to learn a trade which may be useful to them on their return to civil life when transferred to the reserve. The workshops are placed under the supervision of an officer, and in charge of the pioneer sergeant, whose duty it is to seek out workers, and bring them to the shops to work during their leisure hours. If capable workmen can be found they are employed by the Royal Engineers in the repair of the barracks they occupy, and also in other military work, for which they may be suited, and for which they are paid.

Every encouragement is given to the men to take advantage of this opportunity of learning a trade, but at present they are very slow to avail themselves of it. The policy of encouragement of learning trades has been kept in view for many years. Circumstances militate against its success at home, where soldiers are very young and their time is much occupied. Abroad it has better prospects. • In India, at all the large stations, every year there is a "soldiers' industrial exhibition" at which is exhibited work done in the regimental shops during the year. Substantial money prizes are offered for the best work in the various departments, and some very creditable work is usually produced. All the articles are offered for sale and, after deducting a small percentage for expenses and the price of material, the profits are given to the workers. The Indian government gives a grant of money annually for the prizes.

There are in every battalion tailors' and shoemakers' shops, to make and repair garments and boots; any capable man can work in these shops, and thereby gain extra wages. The clerks in the various offices also gain considerable experience in conducting correspondence and in clerks' work

generally. It may be said, therefore, that every opportunity is given to any man so disposed to improve himself in the trade he may be acquainted with, or to learn one he may fancy, thus enabling all soldiers to become better fitted to earn a living in civil life on passing to the reserve than they were when they enlisted.

18.* *Furlough.*

In England, from the 15th October to the 14th March, 25 per cent. at a time of the effective strength of the non-commissioned officers and men of a battalion are permitted to have "furloughs," *i.e.*, leave of absence for a month or six weeks.

They can take with them their clothing, greatcoats, and waist belts, and the railway companies have of late consented to grant them a return ticket to any place they want to go, for single fare, a privilege which has been much appreciated. They receive an advance of pay, and an allowance of 6d. a day in lieu of rations, during the time they are granted leave to be absent.

For shorter periods of leave of absence, not exceeding a week, "passes" are granted by officers commanding companies to well-conducted soldiers, and even recruits, to enable them to visit their friends. Permanent passes signed by the commanding officer are also granted to corporals and well-conducted privates with good conduct badges to remain out of their quarters until midnight. Sergeants can remain out until this hour without special permission.¹

19.* *Married Roll.*

Every corps has its *married establishment*, and the families on this establishment are given quarters with fuel, or lodging money in lieu, and certain privileges as to rations; separation allowances when the husband is away on duty; free passage from place to place on relief, &c.

The establishment allows 50 per cent. of the sergeants and three or four per cent. of the rank and file to be married. The first essential for a candidate is that he should have his commanding officer's leave before contracting marriage; next, that there should be a vacancy on the establishment.

The commanding officer may not give leave to a corporal or a private to marry unless he has £5 in the savings bank, two good conduct badges, and seven years' service. All warrant and superior non-commissioned officers may be married and on the establishment.

¹ The grant of these privileges was first essayed at Aldershot in 1868-9 under General Sir James Yorke Scarlett.

Thus the policy is to make satisfactory provision for superior non-commissioned officers and sergeants in respect of marriage, and to keep it within strict limits as to rank and file, whose re-engagement in army service it is not sought to encourage (see also p. 102). Indeed it would seem more logical to let all sergeants be married and to reduce the numbers allowed amongst other ranks, whose continuance in service with the colours is not so much desired.

The class formerly known as "married without leave" were and are a trouble and discredit to the army; the proper place for a man who is married, for whom there is no room in the establishment, is with the reserve.

20. LOCAL (IMPERIAL) INFANTRY IN COLONIES.

(a) *West India Regiment*.—The West India Regiment is composed of two battalions, and a depôt located at Kingston, Jamaica. One battalion is on service in the West Indies, with headquarters at Jamaica, and one on the West Coast of Africa, with headquarters at Sierra Leone.

This regiment has hitherto maintained its old "regular" organization; and is on the same footing as to officers as a regiment of the line, so that an officer once posted to it would, unless he exchanges or is specially transferred, serve his whole career therein.

The establishment is, in officers, a very strong one—viz., 5 lieutenant-colonels, 6 majors, 17 captains, 42 lieutenants, and 18 second lieutenants. Thus the junior ranks exist in much larger proportion to the senior than is the case in the line, there being, in the West India regiment, 60 subalterns to 28 captains and field officers, and in the line 30 subalterns to 22 of the higher ranks. The battalion in the West Indies numbers 1011 of all ranks, that in Africa 912, and the depôt 300. A number of the staff sergeants are white, the mass of the non-commissioned officers and men are coloured, and are recruited in the West Indies, chiefly in Jamaica.

The men are partially instructed and have practice as

artillerymen, doing duty as such, when required, on the West Coast of Africa.

(b) *Hong Kong Regiment*.—The Hong Kong regiment is organized on the system of a battalion of native infantry of the Indian army.

The British officers are 8 in number—viz., 1 commandant, 2 wing commanders, each commanding half a battalion (4 companies), the senior of these being also second in command of the battalion, and 5 wing officers (including 1 adjutant and 1 quartermaster).

The native officers number 17—viz., 8 subadars commanding companies, one being subadar-major and senior native officer, and 9 jemadars, including an assistant adjutant.

The establishment is similarly composed to that of a British regiment and numbers 1012 of all ranks. Sergeants are called havildars, and corporals naiques. Of these the company has 5 havildars, 6 naiques, besides 2 buglers.

On the formation of the regiment in 1892 all the British officers first posted to it belonged to the Indian staff corps, but for the future, officers of the British service are to be considered eligible. They would be appointed for a term of five years, subject to extension if necessary. The native ranks are enlisted for a term of five years with the option of re-engaging on entering the fifth year of service, if approved.

The rates of pay and staff allowances for British officers are those granted to officers of the Indian staff corps serving in India, together with a local allowance of 100 rupees a month in lieu of Colonial allowances, and with free quarters. Special rates of pay are laid down for native ranks. Pensions are granted to the men on completion of 21 years' service. The non-commissioned officers and rank and file get deferred pay. The regulations, &c., as to interior economy are according to those of the Indian army.

The battalion is wholly of the Mahommedan classes, natives of the Punjab and North West Provinces of India.

21. ROYAL MARINE LIGHT INFANTRY.

The whole of the Royal Marine forces are paid on the Naval vote and are at the entire disposal of the Admiralty. The infantry are grouped in three divisions at Portsmouth, Plymouth, and Chatham. The depôt is at Walmer, where all recruits join and are trained pretty thoroughly before joining their divisions, the course lasting about a year, and including instruction in gunnery.

Officers and men are drafted from the divisions to serve on board ship in detachments as required ; when thus afloat they are under the Naval Discipline Act. When serving ashore they are under the Army Act, and, for discipline, are under the general officer commanding the military district, and are exercised by him at drill and manœuvres in common with the rest of the troops under his command, so far as circumstances, and the exigencies of the military training under Admiralty orders, permit. As regards pay, interior economy and inspection of every kind the Royal Marines have their own regulations, enforced through the Deputy Adjutant-General, Royal Marines, independently of the general officer commanding the military district.

When on active service the Royal Marines are frequently employed on shore in companies or battalions, and are then, for the time being, brigaded with other land forces, or are otherwise disposed in common with the rest of the regular troops. For the Royal Marine Artillery see Chapter XII., and for supply of officers see Chapter XVIII.

CHAPTER IX.

MOUNTED INFANTRY.

FROM the days of Alexander to those of Napoleon the creation of a force of infantry—possessing the steadiness, the solidity, and the weapons of the highly trained foot soldier—yet capable of making rapid marches, has been the ambition of every great commander. No victory can be made complete, no advance secured, no retreat effectively protected without the co-operation of infantry. The power and effect of cavalry acting alone has in all ages been found to be evanescent without the co-operation of infantry to enable them to reap the reward of victory or to save the defeated from total rout. The real difficulty has always been to obtain an infantry which shall have the requisite power of locomotion, and some of the mobility of cavalry, without loss to its value as infantry.

In the endeavour to overcome this difficulty the great leaders of the seventeenth and eighteenth centuries created the dragoon force, which, distinct from “horse” and “foot,” was intended to combine the shock tactics of the one with the fire power of the other. This system, followed by Napoleon at the commencement of the present century, shared the fate of the previous, and of later, attempts in the same direction, and the dragoon regiments, permanently constituted, became cavalry pure and simple, merging their value as “foot” in the more dashing and attractive rôle of “horse.”

The experience of recent years, in our varied and trying campaigns in all parts of the globe, has shown that a mobile and rapidly moving infantry in the field is, for us, a grave necessity. The efforts of an infantry equipped and trained upon the European model, are paralyzed in

the face of an active native enemy operating on the interminable sands of Egypt or the Sudan, the monotonous rolling grass plains of South Africa, or the sultry forests and swamps of Burma. European soldiers on foot alone cannot contend against such an enemy when it is a question of guarding from surprise, of making a rapid advance, or of completing a victory. Necessity has therefore compelled each of our commanders in turn to improvise on the spot as best he could some species of extra mobile infantry, mounted upon ponies, horses, camels, or other animals suited to the climate and country.

The importance of a rapidly moving mounted force, equipped and armed as infantry, had been overlooked, in spite of the experiences in the Napoleonic wars, until the commencement of the War of Secession in America. The Americans, having no repressive military traditions to hamper them, evolved the organization and employment of a mounted force, which, suited to the physical characteristics of the country, combined the action of a rapidly moving infantry with the utmost mobility of cavalry. It may fairly be said that the early successes of the Southern armies were due to the excellence of their horsemen, and on the other hand that the collapse of the Confederate army under General Lee and its surrender at Appomattox court house was mainly due to the enterprise, vigour, and power of the northern mounted troops.

Reading aright the lessons of the American war, leading military opinions in this country have long acknowledged the importance of this new departure on the part of the Americans, and have recognized that while modern cavalry must be trained to act on foot if required, effective fire action can never be expected from cavalry trained as such. Our own regulations do not contemplate that cavalry should attempt to carry on a long continued fight with firearms. Dismounted cavalry can never be expected to compete on equal terms with infantry unless the present system of training and equipment of the cavalry is radically changed, to the probable detriment of its efficiency as cavalry.

Amongst European nations the Russians alone have followed the American lead, as regards cavalry equipment and tactics. While the British cavalry has held to the training and tactics common to all the great European powers, Russia excepted, a small proportion of the infantry of the line has been so organized and trained that, while capable of great expansion in numbers, it can be supplied with the extra means of locomotion necessary to enable it to co-operate with the cavalry—thus giving to a cavalry force the advantage of the additional fire power which brought such success and renown to the American cavalry leaders in 1862-65.

Our existing system, which will be more fully explained hereafter, besides providing a force of infantry capable of co-operating with cavalry, gives to each infantry battalion a small nucleus of picked men who can, if required, act with it as scouts or orderlies, mounted or otherwise provided with the requisite means of locomotion.

The following are the objects in view in the introduction of mounted infantry as an accepted, though not a permanently embodied portion of the British army.¹

- 1.—To provide a force of infantry which shall be capable of co-operating with cavalry and horse artillery when required.
- 2.—To provide as many infantry battalions as possible with a nucleus of selected officers and men trained to act as rapidly moving infantry, for service on colonial expeditions, campaigns in uncivilized countries, or otherwise.

Experience warns us against setting up a permanently organized body of mounted infantry. If provided with horses, the time occupied in their care and manipulation prevents the proper training of the men in their infantry duties, for the careful performance of which alone they exist. It is moreover found that sufficient knowledge of riding and

¹ See the official Regulations and Field Service Manual for Mounted Infantry, 1889.

horse management can be gained in a comparatively short period of training without incurring the unnecessary expense of a permanently mounted force. Infantry soldiers who are permanently associated with horses must in the ordinary course of nature speedily lose their identity as simple foot soldiers.

British infantry have repeatedly been employed as mounted infantry during the present century. The Camel Corps organised by Sir Charles Napier, from infantry detachments, took a leading part in the conquest of Scinde. A similarly organized force under Sir John Ross performed equally splendid work during the Indian Mutiny, while a small body of infantry mounted on ponies, organized and commanded by Captain Havelock (now General Sir Henry Havelock-Allan) finally dispersed in a few days the mutineers in the Shahabad district, who had successfully defied the efforts of a large body of infantry and cavalry for many weeks. In South Africa, mounted infantry played a conspicuous part during the war operations of 1878-79-81. In Egypt, during the campaigns of 1882, 1884, 1885, and more recently in Burma, mounted infantry provided either with horses, small ponies, or camels, have borne no inconsiderable part in the achievement of success in the field.

It was not until February, 1888, that the necessity of training infantry during peace as mounted infantry upon a recognized system was officially acknowledged. Directions were then issued for the organization and training of a limited number of companies of mounted infantry, composed of detachments from different infantry regiments serving in the United Kingdom, and an organization suitable to the given conditions was drawn up by Major (now Colonel) Hutton, to whom the conduct of the system thus initiated was given. A force of mounted infantry thus organized would be available for whatever means of locomotion the necessities of the campaign, or the physical characteristics of the country, might render most desirable. It was considered that men trained to ride horses and to horse management would be readily suited to the care and manipulation of mules, camels, waggons, carts, or cycles. It was moreover obvious that for colonial expeditions or campaigns, horses or ponies would be the most probable, as well as the most suitable, means of conveyance. The training of all detachments selected for mounted infantry has therefore been

hitherto conducted upon horses or cobs, and, to save expense in the initial experiments, the training was at first conducted during the winter months only, upon a small number of horses lent by several cavalry regiments during the furlough season, when they could be most easily spared without interfering with the cavalry training. The organization and training thus begun, proved so successful that it was eventually decided in 1891 to persevere with it and to provide a limited number of specially-purchased cobs for the purpose, and thus gradually to make the mounted infantry independent of any assistance on the part of the cavalry in regard to horses.

In this manner, by degrees, a system of organization has been built up at Aldershot, which, with little expense and without adding to the existing cadres of the army, provides the companies of mounted infantry required either for a foreign expedition or for home defence. The whole campaigning equipment necessary for eight companies is kept in the army corps stores at that station, and the whole of the horses necessary upon a national emergency, have been duly registered by the remount department. Effective machine guns have yet to be supplied and a system of instruction in their use has still to be arranged. The following is the system of organization and training to which reference has been made and which is now laid down for mounted infantry in all parts of the Empire:—

A small but complete detachment of one officer and 32 non-commissioned officers and men, is furnished from each of certain selected infantry battalions. Each detachment thus composed, forms one-fourth of a company and is so organized that it can be used, either independently as a small unit in itself, or, in conjunction with three other detachments, as a complete company.

A sample of the company organization is given below.¹

¹ See also the Regulations for Mounted Infantry, 1st January, 1889.

CAPTAIN ———, — BN. ——— REGT., ——— COMMANDING.

DETAIL OF NO. COMPANY, MOUNTED INFANTRY.

Detail of a Company in the field.	I. Division, Regt.	II. Division, Regt.	III. Division, Regt.	IV. Division, Regt.	Grand Total.	Remarks.
Major or Captain...	1 ¹	...	1	¹ Attached. ² Will be detailed from the cavalry reserve on mo- bilization.
Lieutenants ...	Lt.—	Lt.—	1	Lt.—	1	
Company sergeant- major	1	
Sergeants	2	...	1	
Corporals	1	...	1	
Sergeant-farriers	
Shoeing-smiths	1	...	1	
Buglers	1	
Privates	25	...	24	
Dismounted men, servants, &c.	1	...	1	
Cooks and wagon- men	1	...	2	
Saddler	
Total	33	33	32	33	
		33	33	32	33	

Companies thus organized and trained can be amalgamated and formed into battalions when required, and provided with whatever form of locomotion may best suit the requirement of the campaign.

The unit furnished from each infantry battalion, while sufficient in itself as the nucleus of a larger body if required, is not so considerable in number as to cause serious inconvenience to the battalion from which it is drawn if on the peace establishment, and it is certain that upon a general mobilization of the reserves the withdrawal of so small a detachment for mounted infantry duties, would not affect the general efficiency of the infantry battalions.

The course of training lasting some two and a half months, consists of instruction in riding, stable duties, infantry drill in single rank adapted for mounted service, and field-firing. The shoeing-smiths, saddlers, and transport drivers, receive their training as such under special arrangements. The whole of the drill and instruction is given personally by the officers themselves, and the course of training entails much

hard work and assiduous attention on the part of all ranks. At its termination a printed parchment certificate is given to each man stating his proficiency in "riding," stable-duties," "mounted infantry duties," and "general remarks." These certificates are much prized and are of value in getting employment for the recipient after his discharge, as groom, stableman, helper, &c.

Two hundred and four officers and 3,670 N.C.O.'s and men have passed through the courses of instruction at the training centres established at Aldershot, the Curragh, and Shorncliffe, between Feb. 1888 and Dec. 1892, and many officers of the militia, volunteers, and colonial forces are included in this number. Service in the mounted infantry is very popular with all ranks and, as a rule, no difficulty is found in obtaining the best men, who possess the necessary qualifications and in other respects adequately represent their own regiments, to volunteer for a corps formed for special and arduous duty. Companies of mounted infantry have been similarly organized as instructional cadres and now exist in Egypt, South Africa, and Burma. In India also, arrangements have been carried out for the instruction of small detachments of infantry in riding and stable duties wherever local conditions admit.

Appended is a table showing the authorized organization and establishment for war of a mounted infantry battalion.¹

The principles of the system, the organization, and the training, briefly given above, are equally applicable to the organization and maintenance of whatever mounted infantry might have to be raised under the exigencies of any campaign or local expedition. A pair of cord breeches and a pair of putties are the only articles of clothing to be added to those of the infantry soldier, while for equipment, a waistbelt bandolier, for the carriage of his ammunition, is the only special article required. It must always be borne in mind that mobile infantry

¹ See appendix.

whether called mounted infantry or cyclists have one and the same duty to perform and that their *raison d'être* is identical. The essential fact to be impressed on all is that they are and are to remain infantry, and that the means of locomotion provided by horses, ponies, camels, or mechanical contrivances, to give them an increased mobility, are merely as the means to the end of their more effective service as infantry.

CHAPTER X.

HORSE SUPPLY.

1. *Introductory.*

It is manifest that unless a theatre of war be of a quite exceptional character, horses are indispensable to an army for its cavalry, artillery, and transport. This requirement may be reckoned under three counts—viz., (1) horse supply for the ordinary establishment, wherewith in peace to train the army; (2) that to complete the army to war strength on mobilization; and (3) that to make good the waste during war.

British interests have often suffered from failure in providing each of these items. As to the first the Crimean war may be cited. The army took the field with an inadequately trained field artillery; the absence of any trained transport corps was a still more lamentable defect. As to the second the difficulties attendant on any rapid expansion have always been apparent—notably so recently as 1882 on the embarkation of an army corps for Egypt; and, as to the third, the Wellington (Peninsular) despatches show that commander's difficulties: "it is inconceivable how fast the horses of both cavalry and artillery fall off,"¹ and, "the brigade of heavy cavalry, which has not yet done a day's duty, is obliged to leave here nearly 100 horses. . . I hope therefore you will send us the remounts as fast as you can."² As a general illustration, however, of the straits to which an army may be reduced from want of horses, the condition to which our army in the Crimea was brought may be instanced. General Sir John Adye wrote, in "A Review of the Crimean War, 1859":—

"The commissariat land transport had dwindled down at one time to little more than 300 animals; and the sea transport had been also temporarily deranged by the gale. Owing to this terrible state of affairs, the troops could not receive proper food; the clothing they so urgently required could not be carried up from Balaclava; the huts to shelter them remained on board ship

¹ Wellington to Castlereagh, 22. 6. 1809.

² *Ibid.*, 27. 6. 1809.

or encumbered the strand. For the same reason, fuel, one of their most urgent wants, could not be conveyed to camp. The result was that the troops, suffering from overwork, exposure, night marches, short rations, indifferent shelter, and insufficient clothing, fell sick in such overwhelming numbers, that in January, 1855, of the infantry before Sebastopol the sick in the Crimea amounted to about 4,000; the sick at Scutari and elsewhere, 8,000; total, 12,000. The effective for duty at the time hardly equalled that amount. The deaths in the army amounted to 9,248 men in the seven winter months, not including those killed in action."

"General Canrobert most generously afforded assistance by lending mule litters. The sick were also conveyed to Balaclava on cavalry horses and in artillery wagons, though both conveyances were ill adapted for the purpose."

"500 cavalry horses were employed daily in December carrying up provisions, as were also large fatigue parties of the infantry at Balaclava throughout the winter. . . . Knowing that want of proper supervision was one cause of the casualties among the transport animals, Lord Raglan, on the arrival of 250 Spanish mules, placed them under the charge of officers and non-commissioned officers of cavalry. A cargo of buffaloes in the same way were, when landed, superintended and cared for by artillerymen. Thus various means were adopted to mitigate the evil. In conclusion, the best practical proof of the importance of this branch of an army's equipment, is afforded by the following detail of the land transport corps when peace was signed"—

English and native drivers	..	..	14,000
Animals	..	..	28,000
Waggons	..	..	800
Carts	..	..	1,000

"When the war began the department was represented by the expressive figure—0."

In another passage Sir John shows that :—

"The commissariat transport of the army on landing at Old Fort consisted of about 70 mule carts. A certain number of arabas drawn by oxen or camels were seized in the neighbouring villages. Soon after our arrival at Balaclava, and from time to time, Mr. Filder (Commissary-General) received large supplies of the pack animals which had been left behind at Varna. Some hundred animals were also purchased early in the winter at Eupatoria. Hard work, inclement weather, want of shelter, and irregular supplies of forage caused immense losses. But it will be seen that the transport of the army, such as it was, consisted rather of a miscellaneous collection than of an organized corps; and this was a radical defect."

"The *Times* newspaper at the time alluded to, considered that a waggon train could be organized in a fortnight, or could be settled with contractors in ten minutes; but such remarks are loose, inconsistent, and pregnant with error. No greater mistake can be committed than to suppose that military arrangements thus admit of being improvised; none require more careful preparation, and the general of an army is only hampered by attaching to his forces undisciplined corps, whether for transport or any other purposes. Mere expenditure of money cannot redeem the neglect of previous preparation."

And it was not the action of individuals that was at fault

in occasioning these disasters, but the inadequacy of the system, for which the country itself was responsible. Sir J. Adye, to emphasize this, quotes a speech made after the war by General Peel :—

“I cannot agree with the noble lord at the head of the Government, that the time of this House can be wasted by inquiries into the causes of the calamities which occurred in the Crimea. Now Sir, I have always attempted to remodel bad systems instead of attacking the individuals who had to work them. . . . I believe that the chief cause was your commencement of a great war with little means. . . .”

2. *Organization of the Remount Service.*

The subject of horse supply will be dealt with under two principal heads or conditions, viz. :—

(a) that during peace, and (b) that for war ; whilst each of these will be again considered with regard to the supply at home and in the Colonies. It is not proposed here to touch on the question of horse supply for India, which is one for the Indian government exclusively to deal with.

(a) *Supply during peace.*—Of the numbers of the two classes of riding and draught horses required during peace time, about two-thirds are riding and one-third draught, whilst for active service at least one-third of the whole number should be suitable for riding, the proportion required for draught or pack purposes rising, owing to the exigencies of transport, to two-thirds of the whole number.

During peace time the following branches require horses for saddle, draught, and pack purposes, viz. :—

	Riding.	Draught.	Pack.	Total.
Household Cavalry	825	..	..	825
Cavalry of the line, including Cavalry depôt at Canterbury, R.M. College and M.M. Police	7,014	2	..	7,016
Royal Artillery (Horse and Field) ..	1,587	2,686	173	4,446
Royal Engineers	126	249	20	395
Infantry Transport	80	106	104	290
Mounted Infantry	289	..	..	289
Army Service Corps	323	916	72	1,311
Auxiliary train establishments ..	..	600	65	665 ¹
Total	10,244	4,559	434	15,237

¹ The 665 animals of the auxiliary train are the mules, ponies, and horses kept up at places like Gibraltar, Malta, Cyprus, Egypt, the Cape, West Indies,

Historical.—Under the old system of supply during peace time, the officers commanding cavalry regiments made their own arrangements for the replacement of castings and other casualties; the Royal Artillery had an officer called the Inspector and purchaser of horses, appointed for that duty in England, with a small depôt at Woolwich, whilst the senior officer commanding the Royal Artillery in Ireland, made his own arrangements, with a small staff at his disposal for the purpose, for the purchase of remounts there; the purchasing of horses for the Royal Engineers was conducted for the Deputy Adjutant-General, Royal Engineers, by the inspector and purchaser of horses for Royal Artillery; the horses for the Army Service Corps were passed in by a committee of officers of the corps temporarily assembled. Veterinary examination, excepting in the case of the Royal Artillery, which had a special officer for the purpose, was in each case conducted by the veterinary officer who happened to be attached to the corps. The inspector and purchaser of horses of the Royal Artillery, specially appointed for the purpose, received the pay and allowances of his rank; and he, and all officers commanding cavalry regiments, received an allowance, to cover all expenses of travelling for themselves or their veterinary surgeons, of £1 per horse for every animal purchased. Of the officers recognized as concerned with the purchase of horses, the only one who was specially selected for the task, and the only one who held any staff at disposal for the care of remounts, was the inspector and purchaser for the Royal Artillery.

These arrangements were defective in that no one authority on the part of the War Office got to know what was the proper value in the market of the various classes of horses required, nor where they were procurable; and that a much higher price had to be paid for the remounts by purchasing officers than need have been the case. Great clashing of interest amongst various purchasers was apparent in the fairs and markets, and this became so excessive that officers purchasing for regiments at last placed nearly all their business in the hands of a few dealers, who ruled the market; a method obviously inconvenient and undesirable.

The evil of a want of system continually made itself manifest on the outbreak of war, or the threatening of any small operation; it then became necessary at once to stop these personal arrangements with individuals, and usually, a War Office committee was formed of which the Inspector-General of Cavalry was president, with the purchaser of horses for Royal Artillery and Royal Engineers, the principal veterinary surgeon, and other mounted officers as members. Delay was caused in assembling these War Office committees, valuable time being lost in mapping out districts and in getting the details to work, whilst friction and opposition were apparent.

The effect of this want of organization of the horse supply of the army culminated a few years ago, when about 250 horses were required, within a few weeks, wherewith to mount newly appointed cadres of infantry transport. Not knowing where to turn for this small number of horses, application was made by the War Office to some of the large railway companies to learn if

&c., for barrack fatigues, supplying water, and for Royal Engineer works. In some stations they are the property of government; in Egypt and the Cape they are attached to regimental units for barrack and camp duties.

they could allow their purchasers to supply these wants ; the answer was in the negative ; application was then made to the Royal Artillery ; the remounts were furnished, and all were at work within the prescribed time.

A change was made in 1887, when the Secretary of State for War decided to establish a new system of horse supply for the army. He abolished the purchasing through individual officers and by corps, and made arrangements that the replacement of the annual percentage of horses becoming non-effective through castings and other causes should be effected by an army remount department at the War Office, conducted by an Inspector-General of Remounts, who was to have under his direction a staff of assistants, and two remount depôts, at Woolwich and Dublin. Further, he introduced a system of registration of horses in peace for purchase on emergency.

The staff of the Inspector-General was fixed at :—

3 Assistant Purchasing Officers.

1 Deputy-Assistant Adjutant-General at headquarters.

2 Staff Captains.

2 Captains and Quartermasters Army Service Corps.

3 Veterinary Officers.

Besides the duties of purchase and supply, and the superintendence of the remount depôts, the inspector-general of remounts is charged with the business of the inter-regimental exchange and casting of horses ; the registration of horses for purposes of mobilization ; and, finally, the preparation of annual estimates for the above services and the payment of and accounting for the money.

By this constitution of an army remount department with a responsible officer to conduct the duties, there was established during time of peace at army headquarters a properly organized body to carry out the duties of purchasing which had previously been performed by corps, or on the outbreak of war by hurriedly assembled committees.

These changes were commenced and carried out in 1887 and 1888.¹

¹ See the following : G.O. 172 of 1887, A.O. 202 of 1888, A.O. 519 of 1888 ; also Allowance Regulations, sect. 20.

Purchase.—Ordinary remounts are purchased from rising 4 years to rising 7 years, and between 15 hands 2 inches and 16 hands high; they are classified as riding or draught, according to the work for which they may be best fitted. They are sent to corps either direct or after retention at the depôts, as convenient.

Castings.—Paras. 13 to 19a, Sect. XI., Queen's Regulations, as amended by A.O. 184 of 1892, deal with the question of the casting and sale of horses and mules the property of the government.

The occurrence of casualties, whether from casting or other causes, amongst the horses or mules of a regiment, battery, or corps, is at once reported by the Officer Commanding to the Adjutant-General, and the replacement is made by the inspector-general of remounts, who arranges for animals to be told off from one of the remount depôts, or purchases specially to fill the vacancy. The annual replacement of horses is ordinarily estimated at ten per cent. of the total effective establishment of units, to meet deaths, transfers, or castings.

On reference to the estimates laid before Parliament annually, it will be seen that not including regiments, etc., in India, and exclusive of officers' horses, the total number of army horses of all classes belonging to mounted corps in Great Britain, Ireland, and the Colonies, has been as follows:—

1882-83.		1887-88.		1892-93.
—		—		—
13,478	..	14,271	..	15,396

To replace non-effectives and complete vacancies the following remounts have been purchased¹:—

1882-83.	1887-88.	1892-93
—	—	—
1,346	1,751	1,623

The purchase of these was estimated at the following rates:—

1882-83.	1887-88.	1892-93.
—	—	—
£60,700	..	£86,500
		..
		£82,500 ²

(b) *Supply for war.*—Hitherto the *peace remount* has been treated of; the *war remount* has now to be considered. Under the head, “supply in peace,” has been shown, in its place in order of time, the origin of the constitution of the existing horse supply department under the inspector-general of remounts; but, as will have been seen, by the mention of “Registration of Horses” in the enumeration of that officer's

¹ The old condition of purchasing army remounts was estimated for in 1887-88, and changed during this period.

² Includes the cost, £7,000, for registering 14,000 horses for the reserve at a fee of 10s. a horse, which has been arranged for out of savings from other sources.

duties, its functions are of importance in relation to preparation for war. The table annexed shows at a glance the horses maintained by the combatant units in peace, and those that would be required for war, under the several heads of—

Great Britain and Ireland.	Establishments.	
	Peace.	Home Defence.
Cavalry	7,868	7,463
Royal Artillery (including ammunition columns)	4,288	9,668
Royal Engineers	390	1,853
Infantry Transport	242	4,103
Army Service Corps	1,311	5,631
Details .. .. .	..	31
Totals	13,599	28,749

As indicated on page 180, the proportion of draught to riding horses is, for home defence, nearly as two to one; the large number of horses that would be wanted on mobilization is apparent from these tables.

Prior to the commencement of the present system in 1887–88 we had absolutely no reserve of horses for war. In 1882, on the occasion of the expedition to Egypt, horses were wanted; a War Office committee was assembled to work the country, and it then took seventeen weeks to procure 1,700 remounts.

Formerly, by the Mutiny Act, the military authorities were empowered to hire horses and carriages; this was done through requisitions on the local police, but the hiring, for which fixed rates were levied, was limited by time and distance; if transport, &c., was required beyond this limit there was no power to impress.

In 1888 a new National Defence Act was introduced and passed through Parliament, the provisions of which empowered the government in case of a national emergency, and whenever an order for the embodiment of the militia is in force, to

“purchase” or hire any animals required on behalf of the government.¹

“ Whenever an order for the embodiment of the militia is in force, the order of Her Majesty, authorizing an officer to issue a requisition of emergency, may authorize him to extend such requisition to the provision of carriages, animals, and vessels for the purpose of being purchased as well as of being hired, on behalf of the Crown.”

The latest census of horses in Great Britain and Ireland shows a total of 3,000,000 ; 2,000,000 of which are employed in breeding or agriculture, and 1,000,000 privately or in trade. After obvious deductions for age, size, and unsoundness, about 70,000 horses are considered likely to be found fitted for military purposes.

Consequently there can be no doubt that the requisite number of horses is to be found in this country ; but the question has been how to get at them when required. The floating balance of horses in the hands of dealers, on sale and therefore procurable in open markets, is but small, and has been set down by a very competent authority at a total of 4,000. But green farm horses are useless ; immature horses of any description are inadmissible where immediate service is required of them ; and, for the work of a campaign, none but corn-fed animals full of muscle and energy are of value.

These considerations, together with that of the hardship and probable delay which would attend the enforcement of compulsory purchase under the National Defence Act, have led to the introduction of a voluntary system of registration, which will now be described.

Registration of Reserve of Horses.—To facilitate the more speedy collection of suitable horses on “emergency” ; in other words, to establish a reserve of horses, a system of voluntary registration of horses by their owners has been instituted. Owners having large numbers of horses at disposal are invited to offer them for registration ; those which, on inspection by an officer of the army remount establishment, are found suitable for army purposes are registered, the owner

¹ See section 5 of the National Defence Act, 1888 ; see also chaps. xxix. and xxx.

signing an agreement and receiving in return an annual subsidy of ten shillings per horse. The registered horses are inspected annually by officers of the remount department; the class of work for which they are fitted is noted, and the price at which they are to be purchased, if taken during the year, arranged with the owner, and registered; this price fluctuates according to circumstances, but is voluntarily agreed to.

By the terms of their agreement owners are bound, on the proclamation of the National Defence Act, to furnish, after 48 hours' notice, horses which are serviceable, sound, and of the age, height, and class agreed on at the previous annual inspection. If the owner fail to produce the number and class of horse registered, a penalty of £50 per horse for non-fulfilment can be inflicted. The agreements are terminable by either party on a notice of six months being duly given.

The operation of the above provisions is that horses when presented for purchase would be serviceably sound, of a suitable defined age and size for military purposes, and well fitted to go through the work of a campaign. There are 14,000 horses thus registered in Great Britain and Ireland, many of them hunt horses, the property of different masters of hounds. Of the 14,000 there are about 10,500 fitted for draught, and about 3,500 for riding purposes, which are nearly enough for home defence and are ample to supply all requirements for a small force embarking for foreign service.

By special arrangement with the principal railway companies, as the bulk of the horses they register will require a larger neck collar and head stall than those kept in stock in government stores, it has been provided that for these horses, if found necessary, their ordinary serviceable work neck collars, head stalls, and harness bridles should accompany the horses at prices agreed on.

Proceedings on Mobilization.—To facilitate the purchase and despatch to the depôts of the registered horses in time of emergency, the country is divided into 50 districts. A

purchasing officer and an army veterinary surgeon will be detailed for each district. These officers will assemble, at the places to be notified, on the second day after the order for mobilization is issued, and proceed with their purchasing duties. Assuming that the purchasing officer can inspect, purchase, and despatch an average of 35 horses daily (many of the districts being widely extended), it would occupy from 9 to 10 days to get these 14,000 horses to the depôts; but as a notice of 48 hours has to be given to owners before the required inspection can be made by the purchasing officer, a period of from 11 to 12 days might be necessary for collecting the horses at the remount depôts, after which they have to be numbered and allotted to corps.

Notification will be sent to the regiment of the day on which the horses will be ready to leave the depôts; the necessary officers, non-commissioned officers, artificers and men will proceed to the depôts to remove them, bringing with them the requisite gear.¹

Purchase for Combatant Branches during continuance of Mobilization or of War.—Referring to the third count in the introduction to this chapter, after the army has been supplied with its establishment of horses there remains the problem of making good the waste of war, perhaps in a foreign country. It is certain that no sooner will the first effort of supply have terminated than the energies of the administration will again be heavily taxed to make provision for this enormous waste in horses. Depôts of horses would be formed, in anticipation of losses in the field.

To make good this want the resources of our colonies, and of foreign countries, have been in the past, and would probably again be, largely utilized. Even during peace, from time to time, trial has been made of such foreign markets, either by sending officers to investigate the field of supply, to give information as to our wants, and to purchase on the spot; or, as has been done recently, by purchases of horses brought

¹ Q.R., 1892, sect. xi., para. 6.

to this country in the course of trade, thus stimulating the business. Instances of the first-named method may be cited in the visit, within these last five years, of the inspector general of remounts, to Canada and the ranches of the north-west, and a purchase of horses for the cavalry effected in Hungary by officers sent thither.

Purchase of animals for Auxiliary Train and General Transport.—But, besides the task above described, another object of solicitude will engage the administration, of such importance and specialty as to form a section of work by itself. This is the provision of animals for the auxiliary train or general transport of the army; the description of animals required—horses, mules, camels or other classes—depending on the country in which operations are to be undertaken.

This provision is of the greater difficulty as it is generally impossible to begin to purchase and form large depôts of transport animals any considerable time before war is determined upon. Pressure therefore at the commencement of hostilities is inevitable in furnishing the trains required on taking the field, but this pressure can be reduced by deciding at the earliest moment possible from what sources supplies of animals can most suitably be drawn, and by despatching the necessary officers or agents to conduct the business.

The localities whence this supply would be obtained cannot be indicated here. They depend upon the theatre of war and upon the stamp of animal required, as well as very materially on the disposition of neutral countries in which the stocks of animals exist.

During the Crimean war the countries on the coasts of the Mediterranean contributed largely; in the Abyssinian war, Syria and others. During operations in South Africa, contracts were made in the United States,¹ and a very fine class of mule obtained. The South American field was also resorted to. Production in the latter countries has enormously de-

¹ In the United States, the weight of the animal is an element in the contract, certainly in the case of mules for draught purposes. Thus in 1880 a contract was made for 200 mules at £43 each, 4 to 8 years old, 15 to 15½ hands high, and not under 1,000 lbs. weight. Female mules, if not taken exclusively, are at least preferred.

veloped since certain shiploads of very inferior stunted horses arrived thence in Calcutta in 1857, some of which, *faute de mieux*, were purchased for British cavalry. At that time, on the Pampas, horses were valued at a few shillings each; now some of the best blood of England is employed there at the stud. To aid the Suakin expedition in 1885, India sent some Australian horses,¹ and large numbers of good transport animals, the careful breeding of mules having of late received much attention in that country.

The records of former expeditions furnish very valuable aid to a knowledge of such localities, and of the time within which purchases have in the past been effected.²

The experience of quite recent years shows, however, that horse and mule production in various quarters has undergone much change; there has been a great development in the newer countries, though it is not universal. That the amount and quality of supply will continue to suffer change is probable. The best fields and sources have to be made a subject of continual study and observation, by the proper department, in order that through preparation in peace the wants in war may be effectively and speedily met.

Purchases have been effected sometimes, as in the United States, by contract, and sometimes direct; purchasing officers being sent out accompanied by veterinary surgeons. Under some circumstances the information obtained beforehand by H.M. Consuls has been of much utility. The transport or conveyance of the animals might be included in the contract, or otherwise be provided, as usual, by the Admiralty; the fitting of the ships would be suitable to the particular service or the class of animal to be conveyed. During the progress of operations any equipped horse transports would become available after doing their work in conveying combatants to the theatre of war.

¹ See chap. xxvi. (India) for supply of horses from Australia, &c.

² For animals purchased for Abyssinia see "Expedition to Abyssinia," vol. ii., pp. 109-219; also, "Report of the Select Committee on Abyssinian expedition (401 of 1870, p. 538)." For purchases in the United States in 1879 and during the Egyptian Campaign of 1882, see "Report of the Select Committee of 1884" (285 of 1884, pp. 586, 690, 693).

CHAPTER XI.

CAVALRY.

1. *History.*

The introduction of firearms, about the 16th century, weakened the prestige which cavalry had acquired in the middle ages,¹ and we find horsemen adopting fire instead of shock tactics, even against their own arm. Charles V. is said to have been the first to adopt the squadron formation, and to have replaced the single rank, by lines of ten, six, and three ranks, with infantry intermingled in their midst. Various types of cavalry, dragoons, carabineers, as well as heavy cavalry, appear; and we now first read of the Hungarian Hussars, intended for reconnoitring and outpost duties. Gustavus Adolphus replaced the ponderous squadrons by the lighter formation of "troops," and, in place of the cumbersome slow advance, taught his men to ride up to their enemy at speed, fire a single volley, and then draw swords and charge. Cavalry once again began to understand its true rôle—viz., speed and shock tactics, and Cromwell and Prince Rupert led their horsemen to decide the day by impetuous charges.

After Cromwell, we pass on to Frederick II. and the great leaders Seydlitz and Zieten, who brought precision in manœuvre and speed in execution to such perfection that it was to the cavalry that was confided the decision of the action. Even they, however, neglected one important phase of cavalry duty, for, in the Austrian campaign, the Magyar horsemen completely excelled them in the service of outposts. Napoleon corrected this failing in the French service, and further massed his cavalry into *corps d'armée*, with which he time after time secured the victory; he placed

¹ Denison's "History of Cavalry."

his masses in lines of three and four regiments deep, wherever it was probable that a sphere of action would present itself, either on both flanks or on one, or else in the centre, and overcame resistance by repeated charges.

Passing on to modern dates, the American war shows us cavalry introducing the new element of raids, and the destruction of their enemy's communications. In 1870-71 we find the German cavalry profiting by experience, and not only carrying out the charge at the utmost speed in masses, or by individual regiments, but so successfully employing their independent cavalry divisions in advance of their armies that the bare appearance of an Ulan impressed the opponent with a sense of defeat. Decried as it has been, and deemed superfluous after the successive introduction of archers, of gunpowder, of firearms, and of rifled ordnance, we have yet to learn that cavalry, even in the face of the magazine rifle, has met its match, and that the speed of the charge and the suddenness of the attack, will not, as heretofore, obtain glorious success.

2. *General Organization by Regiments.*¹

The cavalry is organized (as our regiments of infantry of one battalion used to be) on a self-contained basis.² Each regiment consists of four squadrons.³ The cavalry regiments have thus no dépôt, or permanently organized means of forming one, nor have they dependence on any other regiment for support, or supply of men and horses. The regiments recruit for themselves, and the recruits join at the headquarters, or are sent there, as are also the remount horses as soon as possible after purchase. When a cavalry

¹ See also chap. vii.

² By the Army Orders of March, 1893, a very important change is introduced. The Cavalry now exists as four great corps for purposes of enlistment and service, and the mutual support of regiments of each of the four classes of Heavy Cavalry, Dragoons, Lancers, and Hussars is thus placed on a new footing, facilitating the expansion of regiments at need. The text as above was written before the promulgation of this order, which, affecting enlistment alone, will only gradually come into operation.

³ Designated by the letters A, B, C, D.

regiment is ordered to India, or to a colony, it leaves behind it a detachment, which receives its recruits and trains them for despatch to fill its ranks; the horses are usually supplied at the station where the regiment is serving.

There are three classes of British cavalry, heavy, medium, and light; the distinction having relation to the size of men and horses. They are thus composed:—

Heavy:—five regiments—viz., the 1st and 2nd Life Guards, the Royal Horse Guards, 1st Royal Dragoons, and 2nd Dragoons (Scots Greys), of which the first three represent the Cuirassiers of Continental armies;

Medium:—thirteen regiments,¹ comprising all the Dragoon Guards and Lancer regiments, and the 6th Inniskilling Dragoons;

Light:—thirteen regiments, all hussars.

The total makes 31 regiments, numbering 124 squadrons, for service in Great Britain, India, and the Colonies.

3. *Comparison with Foreign Cavalry.*²

It will be of interest to give a few details of foreign cavalry by way of comparison.

The German cavalry is of four different kinds:—cuirassiers (heavy), lancers (medium), dragoons and hussars (light). Each regiment consists of 5 squadrons, one of which is broken up in war time and forms the *depôt* squadron. The peace establishment is 701 men and 667 horses, that for war comprises 668 men and 662 horses. The squadron numbers in peace time 139 men and 133 horses (including 12 remounts), against a war strength of 150 combatant men and horses.

The French cavalry consists of cuirassiers, dragoons, chasseurs, and hussars with a few special African regiments. The system of 4 active and 1 *depôt* squadron obtains as with the Germans. The strength of a squadron on a war footing is 149 sabres and horses, and of a regiment 612 men and horses.

In Austria-Hungary we find dragoons, hussars, and lancers, all medium. Each regiment consists of 6 field squadrons, and the cadre of a *depôt*

¹ The 4th and 5th Dragoon Guards were converted into medium cavalry in 1888.

² Information derived from the several handbooks on Continental armies prepared in the Intelligence Division, War Office.

(*Ersatz*) squadron. The total combatant strength of each squadron is 171 of all ranks, with 150 horses, and of a regiment, 935 sabres.

The Russian cavalry requires a longer notice. It has 2 distinct classes, the regular and the cossacks. The regular cavalry is sub-divided into cavalry of the guard and of the line. The former comprises cuirassiers, lancers hussars, and dragoons, whilst the line cavalry are all dragoons, trained to fight on foot, and to look upon the horse chiefly as a means of rapid locomotion. These carry a rifle and bayonet, the rifle similar to and only somewhat shorter than the infantry weapon. The Russian regiment now consists of 6 squadrons, with a strength of 36 officers and 859 men and horses, and, in addition, a *depôt* or reserve squadron. Each squadron numbers 5 officers, 143 combatants, and 143 horses. The cossacks are commonly looked upon as an irregular force, as were their prototypes the Parthians. Their system and terms of service are special, but recently their individuality has been somewhat merged by the inclusion of cossack regiments in the regular cavalry divisions. The cossack is armed with the lance as well as with the carbine.

Comparison of Dépôt Systems.—Thus we notice that whereas in the other countries named there exists in every case a *depôt* squadron, or cadre, we have only a hard and fast organization of 4 squadrons. It has now come to be fully recognized that on the outbreak of war, the cavalry must be prepared to take the field on the spot, and that to do so with an effective force and ranks filled up, the non-effective men, such as recruits and sick, must be transferred to some body, which will, in return, replace them by efficient sabres. In Germany, and France, immediately on mobilization, one of the squadrons, and in Austria, the *depôt* cadre, become *depôt* squadrons, and the necessary transfers both in men and horses are made with great facility on the spot. These *depôts* now become feeders of the regiment; men and horses becoming non-effective through the rapid waste of war are replaced by new hands and remounts from the *depôt*, and the regiment is in all respects self-supplying. In Russia a reserve squadron exists for each regiment, independent of, and separated from it, consisting of about 150 men and 160 horses. This squadron both in peace and war is used as a remount and training *depôt*.¹

The absence of any such reserve squadron in our service is so striking a want that various proposals have been made of late years to remedy it. Not only does the example of continental nations ever point to the necessity of such a unit, but our own past experience has thrown light on the consequences of trying to forego it. In 1882, when a single cavalry brigade of 3 regiments was sent from England to Egypt, drafts had to be transferred in so wholesale a manner from other regiments remaining at home that the latter were absolutely denuded of their effective men and horses. The late reorganization of the cavalry by the introduction of the squadron system may be one of the first steps towards the solution of the difficulty, even were a *depôt* cadre allotted only to the first few regiments kept on the highest establishment.

¹ Trench, "Cavalry in Modern War."

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¹ Trench, "Cavalry in Modern War."

Difference in Foreign Armies between Cavalry and Infantry as to readiness for War.—On the Continent generally the cavalry service is an exception from the general rule by which the army is expanded by the addition of the reserves from the peace to the war strength. On the contrary, it is held that while the delay would be too great, neither are the reserve men any longer to be relied on for the active duties of horsemen. In 1870 a German infantry regiment was mobilized in about 7 days. On the 1st and 2nd days detachments were sent out to bring in the reserve men, on the 3rd day the arms were drawn and distributed, on the 4th and 5th the men on furlough and horses arrived, on the 6th and 7th the reserves had been mustered, clothed, and equipped, and the regiment was reported ready to march. Now, ever since that year, the Germans have been striving to diminish yet further the required interval for mobilization, so that at present a period of not more than *five* days would suffice.¹ Far different are the proposals for the cavalry readiness. On the 1st or 2nd day the regiment could take the field. Moreover, on the frontiers, special regiments are kept in instant readiness. And so it is in Austria and France, where mobilization would be as quick or even quicker. In Russia, all the cavalry regiments are kept on the war establishment. Generally, in continental armies, cavalry regiments are kept up at the war establishment, ready to march in 24 hours.

4. *Distribution of Cavalry at Home and Abroad.*

Since the Egyptian campaign of 1882, the distribution of the cavalry has been as follows: 14 regiments (55 squadrons) in England, 1 regiment (4 squadrons) in Scotland, 6 regiments (24 squadrons) in Ireland, 1 regiment (4 squadrons) in South Africa, 9 regiments (36 squadrons) in India, and 1 squadron² in Egypt. The five regiments of heavy cavalry do not take their turn of foreign service, but the remaining 26, both the medium and light, serve in rotation at home and abroad. The Indian establishment of nine regiments is determined on the principle of maintaining a just proportion of European cavalry, viewing the number and value of our native cavalry regiments. It is customary to assign two Lancer regiments to that country. The term of service of a regiment in India is, on an average, eleven years.

5. *The Regiment, its Staff and Management.*

The regimental staff comprises the lieutenant-colonel commanding, the senior major or second in command, the adjutant, the riding-master, the

¹ Official "Armed Strength of the German Empire."

² Since 1892, increased to one regiment.

quartermaster, and the veterinary surgeon (attached), two warrant officers—viz., the regimental sergeant-major and band-master, and the following non-commissioned officers—viz., the quartermaster-sergeant, the quartermaster-sergeant farrier, the sergeant-instructor in fencing, and squadron sergeant-major rough-rider, the orderly-room sergeant, the sergeant-trumpeter, the armourer-sergeant, and the saddler-sergeant. The regimental management is on the same footing as that of a battalion of infantry already described.¹ The adjutant performs the office duties and is in charge of the instruction of recruits and young officers; the recruits are not handed over to the squadron commanders for their preliminary training as cavalrymen until they are dismissed their riding and foot drills. The riding-master, assisted by the rough-riders, trains all recruits, whether officers or men, and teaches them the art of fitting saddlery. This initial training naturally affects the entire future equitation of the regiment. After dismissal from the riding-master's hands the young soldier passes into the charge of the squadron commander.

The veterinary surgeon belongs to the Army Veterinary Department² and is attached for duty to a cavalry regiment.

The Squadron System.—An easy revolution was effected in the regimental organization by the introduction, on the 1st. March, 1892, of the squadron system, long since in use amongst European nations. This system had been tried in 1869, but was abandoned, for we find "troops" again adopted in 1870; that is, we went back to the old pattern of Gustavus Adolphus, who was the first to divide his regiments into eight troops. These eight troops, under their own captains, were entirely independent as regards interior economy, but closely combined into four squadrons during drill and manœuvres in the field. Were it not for the known disinclination of the British nature to adopt changes, it would be hard to understand how this arrangement could have lasted so long. Instead of having small units equally divided between all the majors or captains, some having considerable service and others very limited experience; in place of a squadron commanded in the field by one of two officers, each of whom in barracks was entirely independent of the other, we now have a considerable body—a squadron—under one commander, whether in quarters or in the field, a senior officer responsible to his commanding officer, with a double interest in his command, and having for his assistant

¹ See chap. viii. (Infantry).

² For duties, see chap. xvii.

as second in authority, a junior captain of sufficient service, whose ties and associations with the squadron are only inferior to those of the commander himself.

The squadron's establishment of officers is one major and one captain, or two captains if there is no major, and two or more subalterns. The commander is responsible to his colonel for the discipline, horses, arms, accoutrements, clothing and stores of the whole unit. The charge of a squadron is a much larger one than that of a troop, and the staff assigned to it enables it to be treated by the colonel in a large degree as a self-contained unit. What, however, is really the essence of the change from the troop to the squadron system is this—every squadron commander is an officer of experience in the captain's rank and qualified to be intrusted with command; he is one to whom the colonel can confidently delegate powers, consequently the maintenance of discipline is to a much greater extent his personal concern than it was that of the captain under the troop organization.

The commander instructs his squadron through every portion of its field training, and, whether at drill or at field manœuvres, it is to him that the men should look, and upon his word or signal they should act. There is a squadron sergeant-major and a squadron quartermaster-sergeant to each squadron; whilst the former superintends the roster of duties and discipline of the squadron, the latter attends to the pay accounts, as also to the stores and supplies.

The interior organization of the squadron is tactical as well as administrative. It is sub-divided into three or four troops under the control of their own officers and non-commissioned officers. The men are not interchangeable either in barracks or in the field. As far as possible men and horses fall in in the same order on parade, as they occupy in the barrack-room or stable. A regimental staff dominates and administers the working of all four squadrons collectively, and the squadron commander accounts for cash and stores to the commanding officer through the regimental staff.

6. *The Regiment at Home. Establishments.*

The establishments for the cavalry are all laid down in the "regimental establishments of the regular forces, &c.," which are published annually in army orders. For the household cavalry they are, briefly, 27 officers, 2 warrant officers, and 404 of other ranks, with 275 riding horses and 10 supernumerary young horses per regiment. For the cavalry of the line, the accompanying table gives the various strengths, according to the conditions under which they are serving; and also the war strength.¹

The disparity between the number of mounted and dismounted combatants would appear at first sight to be excessive, but, apart from the considerations to be mentioned under 9, if it be remembered that there is a constant flow of raw recruits passing into the ranks and temporarily unfit, men in hospital, those employed as regimental cooks or in other necessary dismounted capacities, men on guard, and men employed as officers' bātmén, it will not be hard to understand that the commanding officer's difficulty chiefly lies in finding effective men to mount his horses, rather than horses for mounting his men. It is to be remarked that the strength in non-commissioned officers is maintained on the full scale in peace time, so that were one of the 31 British regiments called upon to take its place in the field, it would find its administrative body, the leaders, staff and regimental machinery almost complete, and there would remain only the need to supplement the men and horses.

¹ The establishments for 1893-94 will be:—

At Home.

3	Regiments—all ranks,	433	and	275	horses.
6	"	"	"	682	" 410 "
2	"	"	"	627	" 350 "
1	"	"	"	522	" 325 "
1	"	"	"	472	" 300 "
7	"	"	"	454	" 280 "

In Egypt and South Africa.

2 Regiments—all ranks, 498 and 360 horses.

CAVALRY OF THE LINE.

Rank.	Peace establishment, home, maximum.	India.		Colonies.		War establishment, service abroad.		
		Regiment.	Depôt.	Regiment.	Depôt.			
Lieutenant-colonel	1	1	...	1	...	1	a One as transport officer.	
Majors	3	4	...	3	...	3		
Captains	6	5	1	5	1	6		
Lieutenants	8	9	1	7	1	} 16a		
Second lieutenants	3	7	...	3	...			
Adjutant	1	1	...	1	...	1	b For transport.	
Riding-master	1	1	...	1	...	...
Quartermaster... ..	1	1	...	1	...	1		
Total officers	24	29	2	22	2	28		
Regimental sergeant-major...	1	1	...	1	...	1		c Supernumerary.
Bandmaster	1	1	...	1	...	...
Quartermaster sergeant	1	1	...	1	...	1		
Farrier quartermaster-sergt.	1	1	...	1	...	1		
Sergeant-instructor in fencing	1	1	...	1	...	1		
Squadron sergeant - major	1	1	...	1	...	1	d If a sergeant deduct from rank and file and add to sergeants.	
rough-rider	1	1	...	1	...	1b		
Squadron sergeant-majors ...	4	4	...	3	1	4		
Squadron quartermaster-sergeants	4	4	...	4	...	4		
Orderly-room sergeant	1	1	...	1	...	1		
Sergeant-trumpeter	1	1	...	1	...	1		
Armourer-sergeant(c)	1	1	...	1	...	1		
Saddler-sergeant	1	1	...	1	...	1		
Sergeant-cook	1	1	...	1	...	1		
Sergeants (including master-tailor)... ..	24	23	4	21	3	24		e Including 35 drivers.
Sergeant-farriers	8	8	...	8	1	8		
Total sergeants	48	46	5	44	5	48		
Trumpeters	8	8	1	7	1	8	f The peace establishments vary as shown at p. 197 n, and are regulated by estimates annually. The differences lie solely in the numbers of privates and "riding" horses.	
Corporals	32	32	5	28	4	32		
Orderly-room clerk(d)	1	1	...	1	...	1		
Shoeing-smiths	4	4	...	7	...	8		
Saddlers and assistant saddlers	4	3	...	3	...	4		
Saddletree-makers	1	...	...	1	...	2
Privates... ..	558	505	114	383	136	530e		
Total rank and file	600	545	119	423	140	577		
Total all ranks	682f	630	127	498	148	664g		
Attached Officers.								
Medical officer...	1	g The strength for home defence is less by 55 privates 10 of whom are drivers.	
Veterinary officers ... ..	...	...	...	...	...	2
Horses.								
Officers'	59	71	5	54	5	88		
Riding	410	525	37	360	35	457		
Draught ... ..	...	...	...	...	...	68
Pack animals ... ..	...	...	...	...	...	5
Total	469	596	42	414	40	618		

7. *Depôt at Canterbury and Depôts generally in Peace.*

It has been shown that, unlike Continental nations, the regimental establishments do not in peace time comprise an additional squadron or cadre destined to become the depôt squadron on mobilization. There is, nevertheless, a partly analogous system in our service, inasmuch that regiments stationed abroad maintain a peace depôt at home. These depôts, comprising each 2 officers and 100 or more non-commissioned officers and men (the numbers continually varying), and 38 horses, are at present united at the Canterbury establishment, and are temporarily grouped together into a regimental organization with a staff of its own—viz., 5 officers, 2 warrant officers, and 20 non-commissioned officers and men with 20 horses.

The object of this establishment is to act as a school and training ground for the recruits enlisted during the year, who are destined, on attaining the age of 20, to embark and join headquarters abroad, and thus replace the depletion caused by the return home of time-expired men, and by the waste attendant on foreign service. The home depôt, again, permits the return to England of men rendered temporarily ineffective by service abroad, who for a period of 2 years can recuperate their health at Canterbury and then rejoin their corps. The instruction of the recruit comprises riding, fencing, gymnastics, and musketry, with a limited amount of mounted work in the field; it is intended that recruits should reach their corps sufficiently effective to enter the ranks at once.

At present Canterbury is the only source from which cavalry recruits are drafted to regiments serving abroad. Some 20 years ago the system partially adopted was the attachment of the depôt of a regiment abroad to a regiment at home. This method was doomed to failure owing to the absence of any bond of union or tactical basis between these units. The organization of cavalry into 4 squadrons, each under its own leader, between whom and his men both in the field and in barracks there should exist an intimate understanding, does not permit of the intermixture of foreign elements in the ranks.

The depôt which must be formed on mobilization, presumably at the then station of the unit, would consist of the non-effective officers and men, such as sick, and undischarged recruits, and of the untrained remounts. This nucleus would be added to by the arrival of the temporarily unfit reservists, and by the enlistment of fresh men and purchase of fresh horses, and thus form a feeder for the mobilized regiment.

8. *Terms of Service. Standards.*¹

Recruits are taken for the cavalry between the ages of 18 and 25, and as a rule are obtained more from towns than from the country. There is

¹ For first appointments of officers, see chap. xviii.

generally a good supply forthcoming, the dashing nature of the service, combined with a handsome uniform and slightly higher pay affording extra inducements. As in other arms of the service certificates of education are necessary before promotion to the different grades.

A cavalryman enlists under the same conditions as for the infantry. N.-C. officers, and, if recommended, privates, are allowed the privilege of extending their service up to 21 years.

The standards of height, &c., are—

Heavy, 1st and 2nd Dragoons	..	5 ft. 8 in. to 5 ft. 11 in.
Medium	.. ..	5 ft. 7 in. to 5 ft. 9 in.
Light	.. ..	5 ft. 6 in. to 5 ft. 8 in.

The chest measurement is a minimum of 34 inches; for men over 5 ft. 10 in. it is 35 inches.

9. *Instruction of Soldier. Preparation of Men and Horses.*

The first few months may certainly be regarded as the most arduous of a cavalry aspirant's career. He has to learn to use his carbine, his sword or lance, and to practise on foot the different formations of cavalry, before taking his place in the mounted ranks. Simultaneously with this drill under the adjutant's superintendence, the fencing instructor is putting him through a course of 70 lessons with the foils and singlesticks, and he attends at the gymnasium during two months for an hour daily. At the termination of the latter course he comes into the riding master's hands, the course being usually completed after from 90–120 lessons, when he is brought before his commanding officer for dismissal, and, if dismissed, merged finally in his squadron. This riding school course is a very thorough one, and includes instruction in the use of his weapons mounted, packing kit, &c. So far he will have spent from six to eight months at these first drills, but an important part of his training remains to complete, viz., his musketry course. In this, after eight days preliminary drill, he fires 200 rounds at different known ranges up to 800 yards, and performs such practices as volley firing, and the attack and defence of posts with horses. The cavalry recruit can now finally call himself a trained soldier.

Remounts equally with recruits join at various times of the year, to the number of about 10 per cent. on the strength of the regiment. Their age on joining is as a rule 4, and for 12 months they should as far as possible be treated as remounts. On their arrival, in bad condition and underfed, they are placed in charge of a selected officer, and with selected men as riders in the proportion of one man to two horses. It is only after they are pronounced fit by the veterinary surgeon that they pass on to the riding-master, and their earlier days of instruction are subject to frequent interruption from sickness, debility, or other causes. The first week is spent in handling and saddling them, until they submit without fear to being mounted. Very gradually they are brought on to understand the bridle, to obey the pressure of the rider's legs, to rein back, to canter correctly, and to leap. About the fourth month they are bitted, and accustomed to the use of the sword or lance. They are worked in close files and in double rank, and when in every

respect they are thoroughly efficient for the ranks, the commanding officer drafts them for regular duty to their squadrons.

Peace remounts and war remounts.—The above detail shows that a recruit becomes a trained soldier in about eight months, but a remount if young, *i.e.*, about four years old on joining, requires a year, and is then hardly fit to rough it on a campaign. Why, then, is such a large deficiency of horses allowed in comparison with the war strength as is observable. This is a question often asked. The answer is that reliance is placed on completing regiments on mobilization with remounts of a different category altogether from those spoken of above. In fact it is necessary to recognise two classes of remounts—the peace remount and the mobilization remount. In peace, for economical and practical reasons remounts are bought very young, unbacked, unbridled, and unfed; thereby higher class animals are secured, which, when matured, are more useful than would be such older animals as could be purchased for the same money. On mobilization the remounts supplied under the recently established registration system (see Chap. X.), or by purchase or requisition, would be older and seasoned horses, backed, and broken perhaps to saddle, or at least to harness. Thus it has been considered possible to avoid the expense of keeping all regiments complete, while a nucleus and comparative efficiency is maintained; and this, in such a costly arm as cavalry, has ever been the aim of the responsible authorities.

The proportion of horses on the peace establishment to what is required for war is directly dependent on the position of the unit concerned on the list for foreign service; thus in the regiments less likely to be called out, who would have time to collect additional horses, the deficiency of horses is greater, and *vice versâ* in the case of those liable to be sooner employed.

These considerations are quite inapplicable to the supply of men. The man cannot be drafted and trained to the many duties of a trooper, to ride, to wield the sword, to shoot and

take care of his horse, not to speak of acquiring the temperament of the soldier, without months of previous and most thorough instruction. True, the reservist, on national emergency, would be available, but would himself require re-training, he not being in the same degree effective as when he left the ranks; therefore it has been judged absolutely necessary to keep up in every unit, whether high or low on the list for service, a supply of trained horsemen although in excess of the number of horses.

Instruction-Courses.—During the winter months the whole body is put through a three weeks' course of equitation and foot drill, under the squadron officers, who also lecture theoretically on detached duties and on the principles of musketry, as preparation for the practical outdoor instruction in these subjects. There are numerous *special courses* in addition to the squadron field training, which is dealt with in a later paragraph, for instance, musketry, pioneering, reconnaissance, sketching, signalling, Maxim gun and veterinary classes.

(a) *Musketry.*—The course of musketry extends over the whole year, but is principally carried out in the summer, i.e., between Feb. 15 and Oct. 31. Each man armed with a carbine fires 140 rounds, partly at known distances up to 800 yards, partly in field practices, such as section attack with horses, and long range volleys. Those armed with revolvers are allowed 12 rounds, and fire at a range of 30 paces.

(b) *Pioneers.*—On the 1st March every year an officer and selected sergeant are sent to the School of Military Engineering, Chatham, to undergo a 15 days' course of instruction. On return to their regiments they are required to instruct the regimental pioneers (12 men per squadron) in a fortnight's work, using their own regimental equipment tools, the instruction comprising means of forming roadways over soft or marshy ground, bivouacs and hutting, water supply and arrangement for watering horses, the construction of trestle bridges, powers of the different explosives, and, when possible, the actual destruction of railway plant by guncotton.

(c) *Reconnaissance and Sketching.*—During the winter months a selected officer instructs two or more classes of non-commissioned officers or men in reconnaissance and sketching. Horseback sketching is practised, and rough representations with useful reports of the country traversed or occupied by moving or fixed parties of cavalry are produced.

(d) *Signalling.*—Great attention is paid to the training of the 12 regimental signallers belonging to every cavalry regiment under a trained officer as instructor and two non-commissioned officers. Prizes with badges are awarded to qualified signallers. Elementary classes are held during the winter months. Signallers are, as far as possible, treated as a separate unit in the regiment, but included in the ranks of their own squadron in the field. In our various minor campaigns this service has proved itself of great value, particularly where the description of country is unsuitable for horse-

men, and where the neighbourhood is in the hands of savage and fanatical foes.

Besides these classes, special instruction is given regimentally in veterinary science; also in regiments to which machine guns have been allotted, squads will in future be formed to learn their machinery and working, a proportion of officers and non-commissioned officers per regiment being instructed in their use at the School of Musketry, Hythe.

(c) *Field Training in Squadron, and Regimental Drills.*—On the 1st March, the annual field training of the squadrons commences, and the unit concerned is definitely told off into 4, 3, or even 2 field troops, according to the strength of the squadron, and trained collectively as a tactical body under its own leaders for 4 weeks, and for 4 to 5 hours each day, nothing being permitted to hinder the progressive nature of the instruction.

During the 1st week, the elementary drill and advance of the squadron and its preparation for regimental movements, &c., is practised, including the attack itself, as the means whereby cavalry achieves its success in fighting.

During the 2nd week, more independent work is carried out, and the development of the man's individual value and self reliance is insisted on. He is taught how to use his carbine in the defence of a post on foot, how to proceed when detached in the advance or rear guard of a force, &c.

The 3rd week is devoted to teaching the duties of outposts; both from the point of view of "security," i.e., exploration to the front, and assuring the force in rear from unforeseen attack; and of "resistance," i.e., the art of disposing the outposts so that successive bodies may be brought up to a threatened point, and time be thus afforded for preparation in rear. This week is in fact spent in explaining these duties theoretically by lectures, and in practising them, often by opposing one squadron to another in the field.

But the trooper's duties include the attainment of information far in the advance, and for this the reconnoitring or contact squadrons are employed. These squadrons, preceded by officers' parties, again headed by single scouts, scour the country to the front whilst maintaining touch with the neighbouring squadrons right and left, and send back information to the force behind them. This service forms part of the 4th week's course. Added to this, instruction is given in the different types of escorts, whether to guns or convoys, and in the duties of camps, bivouacs, &c., as far as possible practically illustrated.

A searching examination by the inspector-general or commanding officer in all the subjects practised concludes the month's course.

As soon as the field training is completed, from the beginning of June till the end of September, regimental drills replace the exercise of single squadrons.

Besides the more formal drill, the different methods for the attack of cavalry, infantry, and artillery at ever increasing speed, are illustrated, and the horses are gradually habituated to make long advances and to undergo considerable labour without harm. When possible, as when at camps or at stations where the different arms are quartered, manœuvres with opposing sides are worked out.

Period of Manœuvres.—The practice of exercising large bodies of cavalry has as yet found no confirmed footing in England, principally owing to the extreme difficulty of finding the necessary extent of ground, and partly perhaps to the fact that it is still novel to regard the independent cavalry division as an acknowledged factor in European warfare. Nevertheless in 1890 a cavalry division was encamped on the Berkshire Downs and exercised, partly by regiments in the duties of scouting and manœuvring, partly in opposing brigades. In 1891 and 1892, this arrangement was again carried out, and for the first time two brigades were manœuvred as a division in action. The argument for manœuvres consists in the fact that attacks cannot be delivered on one fixed idea, and drill-ground tactics must be developed into more advanced movements. Peace manœuvres can alone afford practice in wielding cavalry masses under different circumstances and in developing their speed and endurance. Leaders cannot be found with heaven-born inspiration; it is experience alone, acquired in peace, that will enable them to use cavalry masses with effect in war.

10. *Regimental Transport.*

In foreign countries, whose generals may be assumed to be only concerned with the defence of their own, or the invasion of their neighbours' territories, it has been comparatively easy to lay down a scale of wagons, carts, and draught-horses, sufficient to carry the regimental impedimenta, and accompany the squadron or brigade upon the excellent roads of Europe. For the British service a scale has been adopted, subject to modification, to suit such special theatres of war as experience shows we may have to act in. Heavy transport of all kinds can keep pace with marching infantry, but light carts, and pack mules or ponies must often be made available for mobile cavalry. It is true that the cavalryman can carry on his horse some food and forage for the day or two days' use, but the element of extra bulk and extra

weight has always to be kept in mind, and the avoidance of a sore back, of wearing out his mount, or of decreasing his mobility, must always be the trooper's first concern. Therefore what can be taken off the horse should be taken off, and quick moving transport on wheels, or lightly loaded pack animals, be provided to keep up with the cavalry detachments.

The special feature of our cavalry regimental transport as laid down is found in the carriage of what must always be up with the regiment—viz., the ammunition and tools; thus, with wheeled equipment, small arm ammunition is carried in ammunition wagons with limbers, which can get over any country.

The principle on which the regimental transport should be divided between what is essential for the day's work, and non-essential, is given in the infantry chapter (sect. 12). In peace, a nucleus is maintained in the shape of one cart horsed regimentally per squadron, for the carriage of squadron stores on the march and for military duty in quarters. The full detail of the cavalry transport is given in the official "Field Army Establishments."

The transport is so allotted as to make the regimental headquarters and each squadron independent in themselves; the latter have each an ammunition wagon, one for stores and one for supplies; the headquarters a forge wagon, a store wagon, and a supply cart.

The "Mobilization Regulations" show the classification of equipments. The personal outfit of the cavalry soldier, besides what he stands in, is what he carries on his horse—saddle and bridle complete, horse blanket, corn sack, haversack, nosebag, shoe case with two shoes, forage kit, picketing gear, carbine and bucket, and mess tin. In the two saddle wallets he carries his grooming kit and a clean change, and, before and behind, a cloak with waterproof sheet, cape, and pair of pantaloons. In addition, he carries his ammunition and an emergency ration.

All stores taken into the field by the regimental transport may be described and classified according to their order of importance under the following headings—viz., (a) ammunition, (b) food supplies, (c) stores, (d) tents (the carriage of which is exceptional). We need only briefly deal with the first two; what the remainder consists in is minutely described in the "Manual for Field Service—Cavalry" published in Army Orders of 1888.

(a) *Ammunition.* The small arm wagons carry the regimental reserve.

(b) *Food Supplies* are of two kinds, rations and forage. Of the former $3\frac{1}{2}$ days' supply are carried for the man, in addition to the emergency ration of 1 day's food; and of the latter 2 days' grain per horse. In both cases part of the food is carried by the consumer himself, part carried in the wagons or on the pack animal, (for full details see Field Army Establishments, 1892).

This food supply, it will be understood, would be daily renewed from stores collected by the supply officers by requisition or by purchase, but the soldier is bound to retain on his person or horse a one day's supply (known as the emergency ration) until absolutely driven to consume it.

The wagons of regimental transport are drawn by 4 horses—the lead pair driven postilion fashion—the wheelers with long reins from the box. The two horse carts are driven postilion fashion. The draught load of wagons is calculated at 10 cwt., of carts at 10 to 11 cwt. per horse, both being intended to keep to the roads in rear of the regiment. The small arm ammunition and tool wagons, being intended to accompany the regiment, are given a lighter draught of from 7 to 8 cwt. per horse.

But should it be considered more suitable for any special campaign that cart or pack transport rather than wagons should accompany the regiment, the same regimental stores could be conveyed in 26 carts with 4 ammunition tool wagons, or by a force of 92 drivers and 239 mules (see *Manual for Field Service—Cavalry*). It is important, so as to admit of this interchange, that packages should not exceed one standard size and weight—viz., length 30-inch, width 15-inch, height 20-inch, and weight 80 lbs. The whole would be in charge of a subaltern as transport officer.

In cavalry transport is included the special material for the destruction of railways and telegraphs which accompanies the advanced squadron, either on the horses or on a special pack animal. Twelve sets of breast harness per squadron are allowed for assisting the transport, or for dragging artillery over bad ground.

11. *Saddlery, Arms, and Equipment.*

The power of mobility of a cavalry soldier depends upon the combined efficiency of himself and his horse. What conduces to this efficiency is primarily the saddle. The trooper should be educated to believe that he cannot be too particular about the fitting of his saddlery; if he allows his horse to become inefficient through a sore back he becomes an encumbrance, useless as a horseman, worthless as an infantryman. Much attention has lately been directed to this subject.

The new saddle is designed for use with the horse blanket in place of with pannels. The former is more suited to adapt itself to the horse's back than the less flexible stuffed pannel. Upon the back rests first the numnah, a soft felt covering which absorbs the sweat, and shields the back from the rough edges and points of the stiff saddletree; upon the numnah lies the blanket, intended equally as a protection, and available as a covering in cold weather. Upon the blanket rests the saddle, of solid leather, with gullet plate of steel or iron and sideboards of wood. The weight of the tree fitted is 13lb. 7oz. The leather girth attachment is in the shape of a V, and serves to keep the heavy saddle securely in the centre of the horse's back,

and to prevent the buckles of the girth from coming under the rider's knees and so chafing the horse's side. Three sizes of saddletrees are issued, marked 1, 2, or 3, on the front arch, so as to fit the different shapes of horses. The blanket is 5 feet 6 inches long, 4 feet 8 inches wide, weighs 4lb. 6oz., and can be doubled up and folded as may be considered necessary to suit the varying stages of condition of the horse.

The weight of a complete set of saddlery is $47\frac{1}{2}$ lbs. At first sight one would naturally pronounce this burden unnecessary, nay prodigious; we must look further at what the saddle must be designed to support. This consists of a dead weight of kit and saddle, say 91 lbs., besides the weight of the rider, about 11 stone, added to what is on his person, say 37 lbs., so that the troop horse must be prepared to carry $19\frac{1}{2}$ stone or 20 stone, or in the case of the cuirassier $20\frac{1}{2}$ stone at the lowest possible calculation.

And yet these horses must be ready to cover great distances. We find in 1882, Sir Drury Lowe and his pursuing brigade marching through deep sand from Tel-el-Kebir to Cairo (about 50 miles) in the two days, besides the night march of 12 miles to the field of battle, and the manœuvring there. In 1890, the cavalry division was called upon to accomplish the distance from Aldershot to Churn in Berkshire (36 miles) between 8.30 a.m. and 6 p.m., and in 1892 from Strensall camp in Yorkshire, a subaltern and 10 troopers, 14th Hussars, carried out a reconnaissance to Bridlington and back, 39 miles each way, between 7.30 a.m. and 8.45 p.m. Again, the cavalry relief from Manchester to Seaforth, near Liverpool, 38 miles, is always accomplished in a single day.

The Equipment, Arms, &c., as pertaining to the soldier himself, to the squadron, and to the regiment, will now be described.

(a) *Arms*.—The *sword* is carried by non-commissioned officers and men, attached when mounted to the saddle.

Lance.—In lancer regiments the complement is at the rate of one per troop horse; in the 4 dragoon regiments recently armed with this weapon lances are only used in the front rank.

Carbine.—One for each sergeant and rank and file is allowed. There are two patterns in use. The latest is the Martini-Metford carbine, Mark I. of 1892, converted from the M.H. carbine, with rifling the same as the Lee-Metford magazine rifle. Its length is 3 ft. $1\frac{1}{2}$ in., its calibre .303, and weight 8 lbs. $1\frac{1}{2}$ oz. It takes the Lee-Metford ammunition, and is sighted from 200 up to 400 yards on the bed, and, with leaf up, to 1,400 yards.

Revolver.—Universal Webley pattern, allotted to each warrant officer, staff sergeant, squadron sergeant-major, sergeant-farrier, and trumpeter, in lieu of carbine.

(b) *Ammunition*.—The trooper carries 30 rounds; those armed with the revolver carry 12 rounds, besides in both cases, the regimental reserve. (Field Army Establishments, 1892.)

(c) *Equipment, Squadron*.—Besides what the man carries in service marching order, we have the equipment of the squadron, consisting, in peace, of one squadron cart, harness, picketing gear, &c., also the pioneer equipment as hereafter mentioned.

Equipment, Regimental.—This comprises signalling, musketry, farriery, pioneering, riding school, musical and sketching requirements, as well as articles required in the various tradesmen's shops—armourer's, saddler's, and saddletree maker's—and when the Maxim gun is issued, a complete outfit for its proper handling.

The regimental pioneers, 1 officer and 12 men, carry the regulation stores and tools, which include those for demolitions, intrenching, &c.

With the view of providing that each squadron should be complete in itself, a new scale of pioneer equipment has been drawn up, and issued to some regiments. The bulk of the tools and stores are to be packed in two large leather cases and carried in the squadron equipment wagon, or arranged so as to be fitted on a pack saddle. Smaller leather cases containing guncotton detonators and small stores will be carried on the saddle by a non-commissioned officer, and by each of the four pioneer privates who act with the squadron.

12. *Mobilization.*

Mobilization is liable to be effected in one of two ways 1st, on a national emergency when the reserves would be summoned, and the horses which are registered for purchase (see Chapter X.) called up; and, 2ndly, for a minor occasion when horses would be got by purchase, or, as on former occasions by transfer, unless other provision is meantime made. For the first case, a nominal list of all men in the 1st class army reserve belonging to cavalry is carefully kept at the Canterbury dépôt. Upon the order for mobilization the officer commanding at Canterbury summons the reserve men in the usual way. Upon joining at Canterbury the reservists receive their clothing and necessaries, and are then passed on to the regiment to which they are posted, where they are supplied with arms and accoutrements. The regiment would draw its 1st and 2nd regimental equipment, as prescribed.¹ In the case of mobilization for a minor occasion, the description of transport to be used, and the supply of horses or animals, would have to be specially determined, and instructions to suit the requirements awaited; the equipment &c. would be drawn or put on board at the place of embarkation, or sent to the dépôt or the place of disembarkation.

¹ For further details see the Regulations for Mobilization, (price 4d.) also chap. xxix.

It is necessary that all arrangements in these matters should be very elastic, and that we should be able to adapt our means to suit the exigencies of the particular service required of the cavalry under any given circumstances.

13. *Horse Transport over Sea.*

The transport of horses is a speciality of the British service. A department of the Admiralty deals with it—viz., the naval transport department, in combination with the quartermaster-general of the army. Fittings for horse transports are kept in store ready to be set up. The general principle is that the vessel, when fitted, is equipped with everything necessary, not only in stalls, sanitary fittings, &c., but also head collars, horse brushes and gear; so that, after perhaps conveying cavalry or mounted troops to the seat of war it may be despatched to any port to ship remounts, and the officers in charge would find everything on board ready for the proper use of the animals, and for their preservation in health. The regulations on the head of fitments and the above arrangements are found in the “Naval Transport Regulations.”¹

The procedure on embarkation would be, roughly, to stow away the saddlery in dubbing in each man's cornsack in some separate room, and to keep the tents, horse blankets, and waterproof sheets in a state of readiness for issue on debarkation.

When transports are alongside a wharf, horses are walked on board by a gangway to their stalls between decks; such was the procedure when embarking from the Albert Docks for the Boer war, 1881. When this is impracticable canvas slings are passed under the horses' bellies and they are carried into the ship by hook and tackle at the rate of about 25 horses in an hour. In 1881 a squadron 200 strong, 14th Hussars, which reached Bombay from Poona at 4 p.m. was all aboard the S.S. “Hankow,” men, horses, and baggage, at 8 p.m., two sets of tackling being used.

When the transports cannot come alongside, the horses must be conveyed to them in boats or floats and hoisted on board by slinging. Each man always accompanies his own horse in the boat. As an instance of how this difficult service can be successfully performed, a troop of 49 horses of the K.D.G. embarked in 1860 at Madras for China on the S.S. “Syrias,” proceeding through the surf in the elastic Masula boats, starting at 6.30 a.m. The

¹ Chap. xxx. should be read in connection with this paragraph, also Q.R., sect. xvii., sub-sect. ix.

horses were all safely aboard at 12 noon, the precaution of lashing the four legs together having been adopted. Again in 1881, a wing of the 14th Hussars, 220 strong, embarking at Durban, were conveyed through the dangerous surf in horse boats, and all safely hoisted on board between 7.30 a.m. and 3.15 p.m.

In the total absence of horse boats the horses must be embarked by swimming. In this case the breast rope, breeching, and sling are fixed on before the horse takes the water; he is controlled while swimming by two ropes, one passed round the neck, the other under his jaw; a rowing boat guides him to the ship's side, and he can be quickly slung up. On 8th June, 1860, in China, a troop K.D.G. was embarked in this manner.

Disembarkations are effected in the same manner, but in reverse order as regards details. Though raising up and lowering horses into the boats and the water requires great care, there is seldom an accident, and, after a little practice, the crews and the men attending the horses become very expert and expeditious. The K.D.G. on the same occasion (China, 1860) disembarked a troop by swimming. Commencing at 2 p.m., they had finished by night, and a few weeks later, disembarking their horses from the ship on to a gun-boat, they equally successfully carried out the duty without loss.

14. *General purposes of Cavalry Divisions and Corps or Divisional Cavalry.*

Cavalry employed in bodies have two distinct services to perform, the one of exploration, the other of security. For the former, regiments are united into two or more brigades, forming a cavalry division under its own commander, or even into independent corps of cavalry; for the latter, regiments combined as brigades or as single items constitute corps, or divisional, cavalry, under the orders of the commander of the army corps, or of the division.

Preceding the army or army corps at some two or three days' march to the front, the independent cavalry divisions or corps will carry out not only the duties of reconnaissance and observation, but will be used to operate against and destroy the enemy's cavalry masses, or to impede his initial mobilization, or to unveil his plans. The divisional cavalry will be employed for the more immediate security of the marching columns, partly in reconnoitring a few miles ahead, partly close in front and on the flanks of the infantry, thus affording the latter that sense of safety which ensures their repose and consequent readiness for battle.

When the hostile masses are in touch, the cavalry divisions under the direct control of the commander-in-chief would presumably be posted on the wings of the army ready to engage the enemy's cavalry or the flanks of his advancing or retiring infantry, whilst the corps cavalry, or divisional squadrons, would, as occasion might arise, either be joined to the independent cavalry divisions, or, choosing a position close up with their own infantry, remain in readiness to grasp the opportunity which occurs so unexpectedly, and by the suddenness and *élan* of their charge complete the overthrow of a wavering foe.

The Organization of Cavalry in Masses:—

(a) *The Cavalry Brigade.*—A brigade of cavalry in the field consists of 3 regiments, 2 machine guns, 1½ companies A.S.C., a bearer company, and a field hospital, giving a total strength of 114 officers, 2,167 non-commissioned officers and men, with 2,219 horses.

(b) *The Cavalry Division.*—The division consists of 2 brigades, and attached thereto as divisional troops are 2 batteries R.H.A., 2 machine guns, a mounted detachment R.E., a battalion mounted infantry, the divisional reserve ammunition column, 1 company A.S.C., and a field hospital. Total, 325 officers and 6,274 non-commissioned officers and men, with 6,518 horses.

(c) *The Mixed Army Corps.*—To an army corps belong 3 divisions of infantry, to each of which is attached a squadron of cavalry, whilst the 4th squadron and headquarters, i.e., the remainder of the regiment, forms the corps cavalry. Under special circumstances a brigade might be employed as corps cavalry.

(d) *On the Line of Communications.*—The strength of cavalry on the line of communications must be a variable quantity partly dependent on the length of such communications, partly on the nature of the country for defence. In the English service a single regiment has been laid down as sufficient for the purpose, i.e., for conveying messages, escorting mails, and for patrolling not only from post to post, but on each flank of the line.

For home defence the individual regiments have been assigned their places and it is now intended to assign a single cavalry brigade to the "Expeditionary force" which is to be maintained in constant readiness for active service abroad.

The Continental Organization of Staff Detachments for Special Duties:—

In foreign armies, on mobilization, a quarter or half squadron is detailed to each corps or divisional headquarters for staff duties, to act as orderlies, &c., and would be generally composed of reservists or of men specially called up. For purposes of illustration we will examine the Austrian cavalry¹

¹ Handbook of Military Forces of Austria-Hungary. Intell. Div., W.O.

organization. In peace time a regiment has 6 field squadrons and a small *depôt cadre*, the latter expanding into a *depôt squadron* and one or two reserve squadrons by the calling up of the reservists. On mobilization each regiment is subdivided into a regimental staff (including a pioneer detachment), 2 divisions each of 3 field squadrons, an *Ersatz* (*depôt*) squadron, a *reserve squadron*, 2 sections of *staff cavalry*, and a *telegraph detachment*. These items are formed at the very outset and probably are detailed on paper beforehand, so that the combatant portion of the regiment can take the field without them, the guiding principle in this sub-division being that the combatant squadrons should remain intact in numbers, and not have to detach parties, to perform the many supplementary duties which fall to the lot of cavalry.

The sections of *staff cavalry*, 1 officer and 25 men, are intended for duty at the headquarters of units, such as divisions, army corps, and armies, or as escorts for the field supply magazines.

The *reserve squadrons* would be employed as army corps or garrison troops.

The *telegraph patrols* consist of 4 trained telegraphists, who each carry in two bags on their horses sufficient wire to open up communication for $4\frac{1}{2}$ miles. This party, or parties, acting in touch with the advanced posts of the army, connect the wire they carry with the main line of telegraphs, which is tapped close to headquarters, and thus the division general is enabled to remain in close connection with his reconnoitring patrols. The wire can be quickly laid along trees and posts or hedges (it is said at the rate of $12\frac{1}{2}$ m. in 2 hours). The electric current is supplied by Leclanché cells.

The importance of the above arrangements for efficiency and *morale* may be noticed. It will be conceded that the *beau idéal* of an efficient regiment is, that the squadrons composing it should serve under the same leaders, be formed in the same ranks, and occupy the same places in war as in peace training; in fact that the transition from practice to reality should be undisturbed by the insertion in the ranks of stranger items, or by the withdrawal of files accustomed to ride side by side and afford each other mutual confidence. The whole training of the squadron has this in view. But the services above detailed, being necessary, must be met, either by the sacrifice and breaking up of individual regiments, thus diminishing the proportion of cavalry deemed necessary for immediate resistance or observation in front, or, as is done on the Continent, by careful organization of regiments beforehand, so that the fighting squadrons may preserve their homogeneous character in peace and when at war.

15. *Inspection of Cavalry.*

The general officer commanding the district inspects the cavalry under his command as regards interior economy and well-being in quarters. Besides this the inspector-general of cavalry inspects the whole of the cavalry during the drill season, and reports on all matters connected with the efficiency and fitness for service of cavalry regiments. At this inspection particular attention is paid to the riding of officers and men, to the knowledge of fitting saddlery, and to stable management; while, in the field, not only is the efficiency of officers and of all ranks in drill ascertained, but the general training in detached duties—outpost, reconnaissance and dismounted service—is thoroughly tested. The inspector-general is called upon to write a separate report, based upon his own observations, and upon the commanding officer's opinion, as to the qualification of each officer, as well as of the regiment; so that a fairly accurate knowledge of individual capacity is in the hands of the authorities.¹ The system of employing the cavalry inspector-general to conduct special manœuvres in the autumn, as practised in Germany, has not yet become an annual institution, though the advantages to be derived therefrom, as well as the difficulty of commanding considerable bodies of cavalry without practice, have been fully demonstrated in the recent manœuvres of 1890, 1891 and 1892. In India the brigading of cavalry in annual winter camps has been practised with encouraging results.

¹ See also chap. viii., *Inspection of Infantry.*

CHAPTER XII.

ROYAL ARTILLERY.

1. *Purpose, Duties, and General Organization.*

The artillery of the army is in tactical and numerical importance a great branch of the land service, ranking with cavalry and infantry. It is, however, organized and governed as one corps, and is proud of its traditions and of its time-honoured title of the Royal Regiment of Artillery. The practical result of this organization is that all its officers are on one list¹ for promotion and that all the men are enlisted for service in the Royal Artillery, and are available to serve in any part thereof.

The purpose of the artillery is the handling, transporting, and fighting guns, howitzers, and mortars, in fact, ordnance of every kind,² and the custody of the ammunition appropriated for its use. It has also the duty in the field of transporting and issuing the small arm ammunition for the rest of the army. Thus the essential duty of artillery is to study and direct the working of the guns or engines which throw more or less heavy projectiles, and to have charge of and distribute ammunition and explosives in immediate reserve for army use.

¹ The separate lists in the Army List show only the officers of the late Indian Artillery which were incorporated with the Royal Artillery in 1862, and which are being gradually absorbed. The old regiments, the Bengal, Bombay and Madras, bore a most distinguished part in all the Indian campaigns up to and including the Mutiny, and their records added lustre to those of the Royal Artillery with which these corps were amalgamated. Their history dates back to 1748, in which year the H.E.I. Company directed the formation of a company of artillery for each presidency. The famous Bengal Horse Artillery was raised in 1800 and did good service in Egypt in 1801. For the history of these corps see works by Capt. E. Buckle, and Lieut.-Col. F. W. Stubbs.

² The so-called machine gun is not a gun in an artillery sense. It has justly been classified as a small arm weapon, to be used by infantry or cavalry who are trained to the use of fire-arms which project small bullets.

The artillery does not, customarily, in the British service construct or build works or batteries in garrison or at sieges, nor construct platforms or gun mountings, but confines itself to the use, setting up, or adaptation of the material or appliances provided for it, or which may come to hand. Nor does the artillery construct or fire mines on shore or in the water, nor employ its men in the storage or custody of general reserves of ammunition, powder, or explosives.

The above duties group themselves under two heads—viz., *Field*, i.e., work with guns for field use, equipped and transportable; and *Fortress*, i.e., work with guns mounted or to be mounted on land or sea-forts, with which work is associated that of guns for the attack of fortresses, called siege artillery. It may here be observed that work with guns in the defence and in the attack is now more than ever materially connected, since the recognition of the fact that, for fortresses, the essence of a good defence is the employment of its ordnance in counter attack, aggressively, from new and unexpected positions, the same means and appliances being often used for these purposes by the defenders as are, necessarily, by the attackers.

The organization naturally follows this grouping, the units being batteries in the field branch, and companies in what we have called the fortress branch.

2. *Historical Retrospect.*

The Royal Artillery has undergone many changes before reaching the present system of adaptation of its means to the ends in view.

Each successive form of organization may be held to have been, more or less, well adapted to the exigencies of the service and the requirements of its own time. Some, if not all, have beneficially left their mark, and have had, like episodes in the history of a nation, their educational effect. See p. 217 for the brigade system of 1859 and the good result it had in spite of its imperfections.

On page 126 the origin of our standing army, in 1660, has

been traced, but it was not until 1716 that the Royal Artillery came into existence as a regimental organization. Prior to this date the artillery required for a campaign was improvised on the outbreak of war, and had no separate existence in peace.

It is not proposed here to dwell on the early history of the British artillery. The late Colonel Duncan, C.B., R.A., has left us his admirable "History of the Royal Artillery," wherein he has dealt fully with those early days when the duties connected with fortification, the management of the engines of war which later took the form of cannon, as well as all engineering work in the field, were shared by the "Ingeniatores, Gunnatores et Artillarii," &c., who were the direct ancestors of the present Royal Artillery and Royal Engineers. He also gives lists of the trains of artillery sent on service from the year 1544 onwards, from which it is seen that the artillerymen and engineers were united under one head, though each had their own especial work allotted to them.¹

The first colonel of the Royal Regiment of Artillery, and father of the regiment, was Albert Borgard, a man whose extraordinary career in the services of Denmark, Prussia, and in that of England (1692 to 1751 when he died a Lieutenant-General), forms a history in itself.

Starting with but two companies, at a cost of £4,891 per annum, the Royal Artillery has grown with the Empire until it has reached its present large proportions.

For the first 140 years of its existence as a regiment it was under the control of a Board of Ordnance,² presided over by a Master-General, and composed of civilians, who controlled the *matériel*, the master-general alone dealing with the *personnel*. In 1855, shortly before the death of Lord Raglan, the last holder of the office, both master-general and board were abolished.

¹ The train of 1544 was under the command of Sir Thomas Seymour, Master of the Ordnance, who had under him, amongst others, a master of the armoury, a lieutenant of the ordnance, two master-gunners, 209 gunners, 157 artificers, 4 officials to look after "the king's great mares for the train of artillery," 6 conductors of the ordnance, 20 carters, a captain and 100 pioneers, &c. (Harl. MSS. 5753). See also chap. xiii (Royal Engineers).

² See chap. xiii.

In 1794 was formed the Corps of Artillery Drivers, whose duties were to supply the necessary mobility to the guns in the field. The corps was not part of the Royal Artillery but separate from it; the officers were, until after Waterloo, drawn from a different source; and the men performed no artillery duties, but were merely for transport purposes. In 1822 the corps was absorbed in the Royal Artillery.

In 1801 the Royal Irish Artillery, which was formed in 1755 and did good service in America, the West Indies, and in the Irish Rebellion, was amalgamated with the Royal Artillery.

After the Peninsular war and the abolition of the corps of drivers, all soldiers of the regiment, except in the Royal Horse Artillery, for which drivers were recruited, were enlisted as "gunners and drivers."

During the dead period, 1819 to 1846, the regiment was reduced to its lowest terms. There was no field artillery at home equipped except seven troops of Royal Horse Artillery, and these had in England only two guns each, with men in proportion. The only field batteries kept equipped were in Canada. At Woolwich we had the *matériel* and horses for three batteries, so called "of instruction;" companies were attached to them, or took them over,¹ and were instructed by their own officers in riding, driving, and drill for a few months, when the equipment was handed over to another company. In 1852, a great impetus was given to the field artillery, and guns to the extent of 104 were horsed in that year. Some of the new batteries appeared at Chobham Camp in 1853—the epoch of military revival. At this period the Royal Artillery was organized in battalions of eight companies each; the headquarters of the battalions, with an adjutant's detachment of recruits, were all at Woolwich where their numerous staffs had quite inadequate duties. The companies were distributed, and were relieved, as required.

In 1855, with the abolition of the Board of Ordnance, the Royal Artillery and Royal Engineers came under the administration of the commander-in-chief. Hitherto these, the scientific corps, had maintained an existence somewhat separate from the rest of the army, and were regarded as outsiders and specialists. This was a state of things very contrary to their natural military instincts, and the effects of the change were not long in making themselves felt in the more direct identification of these corps with the other branches of the army.

In 1859 a great and noteworthy transformation was effected by the introduction of the so-called "brigade system." Brigades of so many companies, thenceforward styled batteries, were formed, each under the command of a colonel, assisted by two or more lieutenant-colonels, some being permanently established as field² and some as garrison artillery; and these brigades took the duties at foreign stations, and were relieved bodily like regiments of cavalry or infantry. The men were henceforward allotted as gunners or as drivers, there being separate standards of height, &c., for each.

This system did very much for the regiment, infusing new life and raising

¹ This was at that time styled "going into battery."

² The establishment of field guns had been fixed at 180 in 1856.

in a marked manner the *esprit de corps* of the whole mass through the increased pride and self-respect which was attained in the individual brigades. It completely failed, however, to satisfy an essential condition of artillery requirements. Garrison artillery must necessarily be more or less wedded to the place it has to defend, and, to be efficient, must be acquainted with its local conditions. Artillery requirements are not complied with if the whole artillery from Malta or Gibraltar, for instance, be removed in a day and replaced by a fresh body. In India, which was the chief station of the field artillery out of England, the distribution of batteries was such as to prevent their deriving benefit from the supervision of the brigade staff instituted for this purpose, and there seems to have been a difficulty in adapting the system of artillery commands in that country so as to harmonize with the new organization.

As result, in 1877, the brigade system was materially modified. The number of brigades was reduced; the batteries serving abroad were affiliated to brigade headquarters at home, which were permanently fixed; and for all purposes, save those of record and supply of men, the battery became an independent unit. Greater power of regimental administration was conferred, but was in the hands of officers commanding Artillery districts rather than in those of officers commanding brigades, and the brigade system practically disappeared.

Subsequently the territorial system was applied, and in 1882 the regiment was divided into two brigades of horse artillery, four of field artillery, and eleven territorial divisions of garrison artillery.

This territorialization was placed on a broader basis in 1889, when the garrison artillery was given its present organization of 3 divisions—the Eastern, Southern, and Western—to each of which certain of the *depôt* divisions of field artillery are affiliated for supply of recruits. This organization, together with certain changes of importance affecting the technical duties of the garrison artillery, superimposed on it in 1891, can best be dealt with under the next heading.

3. *The Existing Organization.*

The existing organization of the regiment is as follows.

The horse artillery consists of 20 batteries, lettered A to T, with 2 *depôt* batteries; the field artillery of 80 batteries numbered 1 to 80, with 4 *depôt* batteries in two divisions; the mountain artillery of 10 batteries, of which the only one at home acts as a *depôt* for the others; the garrison artillery

of 68 companies, divided unequally among the 3 large territorial divisions, Eastern, Southern and Western, and numbered consecutively from 1 upwards in each division, with, in all, 9 depôts or sub-depôts.

The establishments of men and horses in the batteries of horse, field, and mountain artillery are fixed according to the nature and locality of service; but the companies, formerly batteries, of garrison artillery are regulated according to the nature of the works and armaments which they have to serve.

Formerly when more men were wanted at a station, more companies or batteries were added whether more officers were wanted or not. The result was a waste in one or the other direction. At the same time it was apparent that the staff that managed one of those small companies could administer a larger one (say, up to 200 men.) Therefore the principle was introduced of adapting the size of the company to the actual requirements of the station where it was to serve.

The valuable system of having some officers on the establishment but unattached to companies was introduced in 1891, to provide for the better performance of the duties connected with the armament. Under this arrangement officers, called "Armament Majors," are appointed to look after the artillery duties in outlying forts, where no large bodies of troops are quartered. Other officers are provided for technical duties, such as instruction in range taking, &c.

At the same time (August 1891), was created what is called the "District Establishment," which was formed to meet a want long felt, latterly in an increasing degree, namely, that of a permanent staff of skilled officers, non-commissioned officers, and men, unconnected with the companies, who would remain in their several districts with special duties in connection with the armament.

In order to understand the merits of this organization, the situation as to armaments should be explained. There are at home and abroad many sea coast and other forts situated away from the barracks where the companies are

located, and occupied by small detachments. Moreover the works, even in the vicinity of the barracks of the companies, would often not be manned by these in war, but by militia or volunteers from a distance. In both these cases a resident staff is required well acquainted with the ordnance in the forts and with the local conditions of their defence. Until 1891 both classes of works were looked after by the companies, which sometimes had to furnish detachments for the purpose; and, in the case of the more outlying works, by the "coast brigade," formed of old soldiers and officered specially by promotion from the ranks. As the nature of the ordnance composing the armaments came to require an increased skill in manipulation, and as the arrangements to be made on mobilization were perfected, it was realized that the detachments from companies were liable to removal at the critical moment, and that the coast brigade men were numerically and otherwise unequal to supply all that was wanted.

The organization in 1891 of a district establishment provides officers, non-commissioned officers and men, having skilled knowledge in all details as required for the several forts; this establishment thus forms a nucleus of the fighting garrisons, which, on mobilization, are completed from whatever companies (whether of regular Royal Artillery, militia, volunteers, or local artillery abroad), may be detailed for the work, according to the local defence schemes.

(a) *Batteries and Companies, their Distribution, Relief, Depôts, and Drafts.*—The Royal Artillery is distributed at home and abroad as follows:—

- (1) *Royal Horse Artillery.*—At home, 9 service and 2 depôt batteries; in India, 11 service batteries.
- (2) *Field Artillery.*—At home,¹ 38 service and 4 depôt batteries in two divisions; in India, 42 service batteries.
- (3) *Mountain Artillery.*—There are ten batteries distributed as follows:—
8 in India. 1 at Natal. 1 at home (which acts as a depôt).

The mountain batteries in India have an establishment of:—

5 officers..	..	..	..	..	} British.
106 non-commissioned officers and men..	..	..	..	..
192 drivers and artificers..	..	..	..	..
					Native.

Of the latter 43 are baggage drivers and artificers.

¹ One field battery has lately been sent to Egypt.

The establishments of the battery at Natal and the one at home are as follows:—

Natal	{	5 officers.
		179 non-commissioned officers and men.
		18 horses.
		112 mules with native drivers.
At home	{	5 officers.
		231 non-commissioned officers and men.
		12 horses.
		88 mules.

The batteries in India are localized, and their establishments are maintained by drafts from England, as is also that of the battery in Natal.

The relief of non-commissioned officers and men of the batteries serving in India is effected by bringing home those who complete their eight years' service abroad, and replacing them by drafts.

(4) *Garrison Artillery*.—At home, 22 service companies and 9 depôt or sub-depôt companies; in India, 26 service companies; in the colonies and Egypt, 20 service companies.

Three of the companies at home are classed as siege train companies, and their practice and instruction are directed more particularly to siege artillery duties. They are replaced by others after three years service in the siege train.

It will be observed that the service units of the horse and field artillery are nearly equally distributed at home and abroad, but that there are 46 service companies of garrison artillery abroad to 22 at home. There is, however, an approximate equality in the number of men at home and abroad. By the system introduced in August, 1891, a large number of batteries at home and in the colonies were formed into double companies of about twice the strength of the original batteries, but in many colonies and in India the companies are of small strength, hence a smaller number of companies at home have a total strength equal to a larger number abroad. The actual number of all ranks at home and abroad in the various branches of the regiment was as follows on the 1st of January, 1892:—

Branch.	At Home.	In India.	In Colonies and Egypt. ¹	Total.
Horse	1,931	1,889	..	3,820
Field	7,415*	6,838	..	14,253
Mountain	184	945	176	1,305
Garrison	8,806	3,204*	4,794	16,804

* Including troops on passage.

¹ See note, p. 220.

(b) *System of Relief*.—The relief of batteries of horse and field artillery is carried out in one roster for each branch.

The garrison artillery has three separate rosters for relief, one for each division, eastern, southern, and western, into which this branch is divided. The stations at home and abroad are arranged in groups assigned to each division. Thus each division is identified with the armament, and tends to become well acquainted with the artillery requirements, of particular localities.

(c) *Depôts*.—The various depôts receive and train recruits and supply them to the service units on the same general principle as is adopted in the other branches of the service, as described in Chapter VIII.

Recruits for horse artillery are selected from field and garrison artillery depôts, drivers from the former, gunners from the latter.

Each depôt of the three divisions of garrison artillery supplies its own companies, and further the eastern and western divisions supply the 1st division depôt field artillery with recruits, and the southern the 2nd division; the 1st battery 1st division depôt supplies the first 20 batteries on the list with recruits, the 2nd battery supplies field batteries numbers 21 to 40, and so on through the 80 service batteries.

(d) *Drafts*.—The drafts for India and the colonies are made up either from the depôts direct, or from service batteries serving at home.

The one mountain battery at home acts as a depôt to those abroad, and is maintained at a special establishment.

(e) *District Establishment*.—It contains the officers of the old coast brigade as well as position and range finding instructors and a number of ordinary gunners, besides specialists trained in the use of position finders and range finders, or skilled as coxswains, boatmen, machinery experts, &c.

The numbers of the district establishment in any district vary according to its wants. The non-commissioned officers and men once appointed to the district establishment are more or less permanently located in the district, and are not relieved with the companies. The specialists receive extra pay at varying rates, according to their qualifications.

(f) *Royal Artillery District Staff*.—Woolwich, the headquarters of the Royal Artillery, contains what is known as the regimental district staff, which is commanded by a lieutenant-colonel. It comprises the R.A. bands¹ at Woolwich and Aldershot, the clerks employed in the R.A. record office, non-commissioned officers, and men employed in the garrison and various departments of the Royal Arsenal, and those undergoing courses of instruction at Woolwich.

(g) *Royal Artillery Record Office*.—The record office was organized in 1873, and is a branch of the office of the Deputy Adjutant-General, Royal Artillery, under the immediate charge of an executive officer called an assistant superintendent. It keeps the original attestations of the Royal Artillery and of the artillery reserve, which are kept up by monthly casualty returns. It also contains the records of service of batteries, and

¹ The Royal Artillery band was formed by Colonel Phillips and the Royal Artillery officers in Germany in 1762. The Royal Artillery was the first regiment in the British service to use fifes and drums, in 1747. Browne's "England's Artillerymen," p. 307.

the muster rolls of the regiment from 1715 to 1859. It verifies claims to good conduct pay, compiles the statistical returns of the regiment, and answers enquiries as to soldiers of the Royal Artillery.

(h) *Riding Establishment*.¹—The riding establishment at Woolwich acts not only as the School of Equitation for the Royal Artillery in the training of men as rough-riders and the instruction of officers and men of the regiment in riding, but it also carries out the instruction of officers of the Marines, the cadets at the Royal Military Academy, and various other items, either quartered at, or sent to Woolwich expressly for the purpose. Its fixed establishment is under a lieutenant-colonel, and includes 2 riding-masters.

(i) *Ammunition Columns*.—As we have already mentioned, the Royal Artillery is charged with the ammunition transport of the rest of the army.

For this purpose it maintains in peace, at the places at which the ammunition and equipment are stored, the nuclei of ammunition columns, each consisting of 1 warrant officer and 6 men. On an outbreak of war the necessary columns are formed from these by the addition of officers, non-commissioned officers, and men from existing units of artillery, and from the artillery reserve, and of horses from the remount establishment. There are 15 of these columns thus provided for.

(j) *Armament Artificers, Royal Artillery*.—A "corps of ordnance artificers" which was formed in 1882, was dissolved in 1893, and its *personnel* incorporated in the Royal Artillery. Armament artificers, with the rank of sergeant, are provided in certain Royal Artillery districts, at home and abroad, for duties connected with the repair, fitting, and maintenance of war department material, including ordnance, and the charge and repair of hydraulic machinery, steam engines, boilers, pumps, and electric lighting machinery used with guns. These artificers work under the orders of the inspector of ordnance machinery, except when otherwise ordered. When not required for work connected with the repair, &c., of material in charge of the Royal Artillery, the services of the armament artificers are placed at the disposal of the ordnance store department by local arrangement.

The artificers belong to the district establishment, Royal Artillery, and are dealt with by the officers commanding those units for purposes of pay, discipline, &c. Those under training at Woolwich are similarly dealt with by the officer commanding Royal Artillery regimental district staff. The establishment consists of 1 sergeant-major, 112 staff sergeants and sergeants, which will be increased from time to time as necessity arises. Vacancies for armament artificers are filled by (1), soldiers who, on being finally approved, are discharged from their present engagements and again enlisted on fresh attestations for the Royal Artillery; (2), civilians specially enlisted. Applicants for appointment must be competent fitters, with some knowledge of mechanical drawing, not over 30 years of age nor under 21; of good character, and, if soldiers, recommended by their commanding officer.

Probationers (soldiers) and civilian candidates will be required to undergo

¹ The riding-house establishment was formed in 1806, Colonel Charles Adolph Quist being given the command. He was a natural son of Gustavus III. of Sweden, who was assassinated by Ankerström. Browne's "England's Artillerymen," p. 310.

a course of instruction at the Royal Arsenal, including the gun factory, for a period not exceeding 12 months. If then found qualified, they are enlisted and promoted direct to the rank of sergeant armament artificer.

(k) *Royal Malta Artillery*.—The Royal Malta Artillery is one of the regular corps of the British army, though raised in the island. Its establishment is nearly 460 of all ranks, and it has its own reserve. The uniform and training are analogous to those of the Royal Artillery; its pay and maintenance are voted annually by the Imperial Parliament. The Malta Artillery served in the Egyptian campaign of 1882, and is allowed in consequence to bear the distinction "Egypt, 1882."

(l) *Local Artillery abroad*.—This comprises the local artillery of Hong Kong, Singapore, Ceylon, and Mauritius, recruited from the fighting races of northern India; and that of St. Helena, Sierra Leone, Jamaica and St. Lucia, recruited locally. These bodies are officered in some cases by natives, and are commanded by officers of the Royal Artillery.

4. *Supply of Officers and their posting to branches of the regiment.*

Officers for the Royal Artillery are obtained mainly through the Royal Military Academy at Woolwich, though a few come in through the Artillery Militia and the Royal Military College, Kingston, Canada. On occasions of urgency, direct commissions in the Royal Artillery have at times been thrown open to public competition. The conditions for first appointments in the Royal Artillery are given in the chapter dealing with the supply of officers.

On being commissioned, officers are appointed to field or garrison artillery according to their places on the list, in the vacancies which exist at the time, or as they may occur, and in the same order. The only exceptions to this rule, on first appointment, are in the cases of the senior cadet, and the cadet obtaining the riding prize, who are given their choice of field artillery should they not be posted to it in the way explained above.

Subalterns may be, and often are, selected for transfer from the garrison to the field branch of the regiment during the first three years of service, the selection being guided by their adaptability for mounted work over the more scientific work of garrison artillery. Officers commissioned before the 1st August, 1891, may be transferred without reference to the limit of service above referred to. On promotion to higher

rank officers are posted to the field or garrison artillery as vacancies may be available, according to the branch of the regiment in which they were previously serving, and without reference to the gazetted succession. First appointments to the Royal Horse Artillery are made, on special recommendation as to physical eligibility and general efficiency, from officers in the second to the fifth year of their service, whether serving in field or in garrison artillery. Officers in the grade of captain and upwards, selected for appointment to this branch, must have served in it before, unless in very special cases, such as for distinguished service in the field, or for exceptional merit otherwise.

5. Education and Training of Officers.

On obtaining his commission as second lieutenant in the Royal Artillery the young officer is first sent to the School of Gunnery, Shoeburyness, and undergoes a course of instruction, lasting six weeks or two months, in drill with guns and mountings of the latest types, and on its conclusion is sent to join his battery or company. Officers joining from the Artillery Militia or Royal Military College, Canada, are, in addition to the above course, ordered to attend the Artillery College, Woolwich, and are there instructed in organization, military law, manufacturing details, &c., before proceeding to Shoeburyness. Second lieutenants, lieutenants, and captains of artillery have to pass the usual examinations for promotion.¹

During an officer's service in the ranks of lieutenant and captain he may be ordered, or may offer voluntarily, to attend the long course of gunnery and other professional courses of instruction. Other courses² in various subjects are open to officers of all ranks. Thus it may be said that the education of an artillery officer is always proceeding, and, in these days of complicated armaments and constant advances in military science and art, it is absolutely essential that all officers, more especially those of the scientific branches of

¹ See Q.R., sect. ix., and app. vii.

² See "Artillery College," chap. xxv.

the army, should continually be studying their profession.¹ Foreign service and extra-regimental appointments, while giving to the officers holding them valuable experience and insight into the working of other branches of the service, will naturally often cause a corresponding tendency for an artillery officer to get somewhat rusty in the more technical parts of his own profession, and it is for these officers more particularly, a necessity and a valuable privilege that they should have frequent opportunities of refreshing their memories, and of bringing themselves "up to date" by means of the periodical courses of instruction which are open to them in connection with the Artillery College at Woolwich, and at other places.²

6. *The Ordnance Factories³ and Technical Branches.*

It is of the utmost importance that those fields of work which may be classed as the purely scientific part of the profession of an artillery officer should be duly provided for by officers who have a special leaning and aptitude for such work.

To qualify an officer for appointments in the ordnance factories, he is required, as a general rule, to have obtained the certificate of the senior class Artillery College,³ which entitles him to the letters *p.a.c.* (passed Artillery College) after his name. Similarly, for appointment as member of the ordnance committee, in the department of the director of artillery, as fire-master, inspectors, instructors in position and range-finding, and gunnery instructors, special certificates and qualifications are needed, as well as for the posts of professor and instructor at the military educational establishments. The above appointments, though many of them are of a highly special and technical nature, are subject to a limit of tenure of so many years, after which the holders are required to vacate them and return to regimental duty. In the interests of the public service officers may be permanently retained in the manufacturing departments, and in the department of the director of artillery, in which case their promotion is limited, with but few exceptions, to the rank of lieutenant-colonel.

¹ The R.A. Institution, which forms a valuable help towards the education of artillery officers, will be found referred to in chap. xxv.

² The system of "refreshing," or re-qualifying courses, as worked out for H.M. Navy, constitutes a valuable example of what may be done in this direction.

³ See chap. xxv.

7. *The System of Command.*

As regards command, the Royal Artillery is treated rather as one of the main branches of the service than as a mere regiment.

To facilitate his control of the whole artillery service, which, like other branches, is under his direct command, each general officer commanding a district has upon his staff an officer—in some cases a major-general and in others a colonel—who, while he acts as chief artillery staff officer, is also himself in immediate and executive command of the *personnel* of the regiment within the district, and corresponds, on points of detail, with the chief staff officer of the regiment at headquarters, *i.e.*, the Deputy Adjutant-General, Royal Artillery.

Each officer commanding the artillery in a district has under him a staff officer, generally appointed as brigade major; the special officers of the district establishment—*viz.*, instructors in gunnery, position-finding, and depression range-finding, in districts where such officers are required, also form part of his staff. In certain districts there also is a riding-master on the artillery staff, and in some, a quartermaster.

The colonel commanding the horse and field artillery at Woolwich carries out the administrative duties in connection with the batteries of those branches at home and abroad, and the officers commanding the artillery of the military districts at Dover, Portsmouth and Plymouth, similarly carry out the administrative duties connected with the three territorial divisions of garrison artillery, and are respectively responsible for—

- (a) The training and supply of all drafts required to keep the batteries and companies serving abroad up to their establishments.
- (b) The maintenance of the batteries and companies at home at their proper establishments.
- (c) The promotion of non-commissioned officers above the rank of sergeant to positions below warrant rank, and appointments dealt with at army headquarters.
- (d) The instruction of a sufficient number of men as carriage smiths, wheelers, collar-makers, and the maintenance of the supply of artificers and specialists.
- (e) The supply (in the garrison artillery) of duly qualified instructors to militia and volunteer artillery.
- (f) Instruction of non-commissioned officers in special courses.
- (g) The proper and efficient working and maintenance of the depôts and sub-depôts.

8. *Instruction. Classification of Soldiers.*

The instruction of the soldier in the artillery, while embracing many of the features of the instruction of soldiers generally, has, of course, features peculiar to the arm.

Thus, while both gunner and driver must learn to march, undergo courses of schooling and gymnastics, &c., the driver must be instructed in riding and driving, in the fitting and care of harness, the care and grooming of horses, &c. In the horse artillery the gunner must also learn to ride; and the gunner of each branch, horse, field, mountain and garrison artillery is taught to serve, lay and fire his gun, and to dismount, move, and mount it. The care of stores, of magazines, ammunition and equipment also forms part of his education, and the garrison artillerymen, or some portion of them, are taught the use of range and position-finding instruments, rowing, a certain knowledge of machinery, hydraulics, electricity and steam.

To combine instruction in these very varied subjects with the performance of a soldier's ordinary duties, such as guards, fatigues, &c., requires careful organization.

A recognised distinction as between "young soldiers" and trained men has therefore been introduced in the Royal Artillery, caused by the necessity of not letting his ordinary duties interfere too much with the instruction of the young soldier.

On joining, the soldier is known first as a recruit, and goes through a course of recruit's drill, which is laid down as of 130 and 56 days' duration in field and garrison artillery respectively. On completion of his course the recruit is returned for "duty," but his training continues; when returned for "duty" he ceases to be a "recruit," and passes into the category of a "young soldier." As such, he is instructed in all the subjects in the drill books during one year; during this period he is borne on a special roster for duty, and performs it at times when his instruction would be least compromised.

Moreover, in the Royal Artillery, men are *classified* as 1st, 2nd or 3rd class according to professional knowledge; young soldiers are placed in the 3rd class; from this they pass to the 2nd and 1st classes by means of examination in certain specified subjects. There are certain appointments which can only be held by 1st class gunners. Promotion to non-commis-

sioned officer does not depend on the class in which the soldier finds himself, but of course his class is taken into consideration.

Mounted non-commissioned officers and men are also divided into three *classes* with regard to their riding capabilities. Recruits join the 3rd class, and when completely instructed and fit for any duty they are raised to the 1st class. The 2nd class exists for men who show no signs of qualifying for the 1st class, but whose 3rd class education has been completed.

9. *Field Training or Annual Courses.*

Besides the ordinary drills and instruction carried out throughout the year a period of special instruction is laid down for each battery or company, during which it is struck off all duty to enable the officers to get hold of their men and to instruct and drill them collectively.

This annual course is of five or six weeks' duration in the garrison artillery, and lasts for twelve working days¹ in the mounted branches. It should be gone through before the annual practice of the battery or company, in order that the latter, the most important part of an artilleryman's training, may be carried out under favourable circumstances. This annual course consists of lectures on the theory of gunnery, and on the gun, projectiles and sights; the method of ranging a battery and fire discipline. The practical part of the course consists of drill, laying, making up ammunition, boring fuzes, and the application of the theory as to fire discipline. It is carried on by the major and officers of the battery.

The Royal Artillery are required to go through a short annual course of musketry practice and instruction, and the course laid down is, for recruits, preliminary drill of two days, target practice (20 rounds apiece), also extending over two days and embracing individual and volley firing. The trained soldier's course lasts three days, and 40 rounds per man are fired. The musketry of the Royal Artillery is not subject to the supervision of the inspectors of musketry of the army, and their carbine practice has very frequently been omitted. As, however, guards, even in peace, are entrusted with ammunition, and their own lives and those of others are dependent on its efficient use, it is essential that every man who is armed with a carbine or revolver should have opportunities given him for practice therewith.

The gun practice of the artillery is obviously of great importance. It is carried out by the Royal Artillery either at the station at which the battery or company is quartered, or at some camp or practice ground selected for its suitability for efficient practice.²

There is much difficulty in finding good land ranges for horse and field artillery; the one good land range used is at Okehampton, in Devonshire; each battery practises there once in three years. Other batteries quartered at home generally carry out their annual practice at Shoeburyness,

¹ Compare Infantry and Cavalry, chaps. viii. and xi.

² See chap. xxv., p. 430.

or Glenbeigh, in Ireland; a few use the Lydd ranges, or others on the coast line. The mountain battery practises at Hay. The garrison artillery by preference fires from the actual works that it would man in war, but occasionally it assembles in a camp or at a selected range for purposes of instruction. The camps or ranges at which practice—other than local—takes place are at the Isle of Wight (western forts), at Devonport, and at Lydd, the latter being used by the siege train companies.

Practice itself—so far as the garrison artillery is concerned—may be divided under two heads, that for the man, and that for the gun. Practice for the man takes place in the shape of “company” and “regimental practice”; the former embraces artillery instruction in the abstract under the officer commanding the company, and the latter, under the lieutenant-colonel, is intended to familiarize all ranks with every kind of gun and mounting with which the company has to do in its district. Practice for the gun is known as “station practice,” and is chiefly a test of the efficiency of the ordnance and mountings. Each gun fires a certain limited number of rounds periodically, and when service projectiles cannot be employed, dust shot is used to test the recoil—otherwise, blank ammunition is fired. The militia and volunteer artillery are granted a certain amount of ammunition for annual practice, as is done with the regulars, and regard is had to the desirability of firing, when practicable, with the actual guns they would man on mobilization.

10. *Regimental Transport. Arms, Ammunition, and Equipment.*

The regimental transport for field and horse artillery may be defined as that which is detailed¹ to carry such stores and food, and occasionally tents, as are not conveyed on the guns and the ammunition wagons.

These latter, as well as the forge and store limber wagons, are specially designed and horsed so as to be equal to going over any ground which is practicable for artillery. The general service wagons in use cannot claim this degree of mobility. For this and other reasons, on the march and in the field a classification is made to provide for the separation at need of the fighting portion and the transport portion of the wheeled carriages of a battery.²

The royal horse artillery and field artillery are provided with a breech-loading gun of high power, known as the 12-pr. B.L. gun, although a few batteries have still the 9-pr. R.M.L. gun. The artillery handbooks of these guns and the field artillery drill book give all particulars.

The horse and field artillery carriages are fitted for shaft draught, but

¹ See tables in “Equipment Regulations.”

² For details of this classification see Colonel Rothwell’s “Lectures on Staff Duties,” p. 158; see also the remarks on regimental transport in chapters viii. and xi.

experiments are in progress which point to the introduction of pole draught, which in many respects is better suited for campaigning.

The mountain artillery gun is the 7-pr. of 150 or 200 lbs. weight.

The personal armament of the non-commissioned officers and men of the regular artillery is as follows:—

In the horse artillery all ranks have the cavalry sword; drivers have the pistol, Webley pattern. In the field artillery, only non-commissioned officers and trumpeters have the cavalry sword, drivers have the pistol, Webley pattern, and each gunner has a sword-bayonet. There are 12 carbines per battery of horse and field.

In the garrison artillery every non-commissioned officer and man on the company establishment has a carbine and sword bayonet.

11. *Mobilization.*¹

The mobilization of the artillery follows generally the same rules and principles as that of the army, which is described elsewhere.

One point of difference is that batteries of field artillery are now supplied with their complete war equipment in time of peace, and that, therefore, they receive on mobilization no second regimental equipment. This enables them to move complete to the place of concentration.

It may, of course, happen that only a few batteries are to be mobilized, in which case they may be completed as to men and horses from other existing batteries without calling on the reserves.

The garrison companies mobilized for home defence, and also a large part of the militia and volunteer artillery, being told off to what is termed the garrison army, *i.e.*, the garrisons of coast fortresses, receive their personal outfit, but their further equipment is more limited owing to their being more stationary, and quartered as a rule in or near large towns.

The artillery reservists when called out proceed, if belonging to horse and field artillery, to join the depôts of these branches at Woolwich; if belonging to mountain artillery, to the dépôt of the Western division, Devonport; and if to the garrison artillery, to the dépôt of the division to which they belong. There they receive their clothing and

¹ See "*Mobilization Regulations.*"

necessaries, and the officer commanding the depôt gives them their orders as to the units they are to join. Arms and accoutrements are issued to them on joining the unit.

The militia and volunteer artillery units are told off in the district defence schemes to certain places.

In the case of the garrison army the principle followed has been to tell off to each unit a certain work or works, so as to avoid as far as possible mixing two or more units in one work. The regular artillery, being but a small portion of the whole artillery garrison is assigned to the works where, from the nature of the armament, its services are most needed. Not only is each militia and volunteer corps allotted to a certain work or works, but it is also assigned certain guns in those works, and the object is, first, to limit the variety of "natures" of guns; secondly, to ensure each corps not only being accustomed to drill with that class of gun but being practised periodically at the actual works and the individual pieces to which it is told off. It therefore becomes of great importance to arrange for this periodical training and for practice with service ammunition where possible, even in the cases of corps which may be stationed at some considerable distance from works assigned them. On arriving at the work for such exercise, whether for a few hours' drill or for several days' instruction, they find every preparation made for them by the permanent district establishment now quartered in each fort, and all local aid in the way of information and instruction is rendered them by the Royal Artillery.

12. *The Artillery with the Division and the Army Corps.*

In the design, equipment, and allotment of the artillery to accompany an army in the field, fire power and mobility are the two elements which have to be harmonized. The claims of the one tend to conflict with those of the other; hence an expenditure of energy in thought, as well as of money, must be faced and provided for in order to reconcile the two, and to place the artillery in the field in a position to meet the demands made upon it.

The artillery is not an independent but an auxiliary arm. It serves the army by preparing the way for the troops of the line, especially the infantry, to advance to the assault, or, when acting on the defensive, by protecting them from hostile onslaught.

A proportion of artillery is attached to each division (divisional artillery) and also to each army corps (corps artillery), the number of batteries assigned being shown by the tables in the Appendix. The commander of the divisional artillery, a lieutenant-colonel, is at the same time its regimental

commanding officer, and acts as the artillery staff officer of the general commanding the division, whom he accompanies in the field, taking his orders or suggesting the action of his artillery, and then resuming the personal command of his batteries when acting collectively. The commander of the corps artillery is a regimental commanding officer; he usually receives his orders from the commander of the artillery with the army corps, who is a colonel or general on the staff of the army corps. This latter officer is in a similar position to that described as occupied by the commander of a Royal Artillery district (see p. 227). He is responsible for the artillery efficiency of the whole of his command as to *personnel* and *matériel*, and advises his general as to its employment, but does not interfere with the executive command of the divisional artillery unless it is placed under his orders. If it is then to act, as it often must, massed with other divisional artillery, or with the corps artillery, he would probably assume the command personally.

Thus the divisional artillery must always have two masters, and all parties have to exercise their functions with a due discrimination.

The corps artillery is usually composed of both field batteries and horse artillery, it being deemed specially necessary that mobility should be given to the artillery which occupies this position in the order of battle, on account of the great distances it may have to traverse rapidly to reach a point where the advanced or outlying troops require artillery support for the successful prosecution of the operation in hand. The reference above to the frequent employment of artillery in mass is sufficient to indicate the importance of yet a third element, which has to be dealt with when the composition of the artillery with an army is to be considered—viz., homogeneity in the “nature” of gun used, and consequent identity of ammunition. Besides other advantages, this conduces to accuracy of shooting, combined with rapidity in getting the range, which are the conditions of success of artillery action.

13. *Inspection.*¹

The inspection of batteries and companies is carried out by the general officers and colonels on the staff commanding Royal Artillery, as follows:—

The general officer commanding at Woolwich inspects the horse and field artillery in the Woolwich, Eastern, and South-Eastern districts; the general officer commanding the artillery at Aldershot inspects that in the north-Eastern, North-Western, Scottish, and Western districts, and at Aldershot; while the general officer commanding the artillery in the Southern district inspects mounted batteries in his own command; and the colonel on the staff at the Curragh inspects horse and field artillery throughout Ireland.

The garrison artillery is inspected in each district by the officer commanding the Royal Artillery in the district. The commandant of the School of Gunnery, Shoeburyness, as inspector of artillery instruction, exercises supervision over the instruction at Okehampton, Lydd, the Isle of Wight

¹ See also chap. viii., sect. 14, Inspection.

(western forts), the school of instruction at Devonport, and the range-finding school at Aldershot.

The artillery in a district is of course also inspected by the general officer commanding the district as with other corps under his command, generally after receipt of the report of inspection of the officer commanding Royal Artillery of the district upon each unit.

ROYAL MARINE ARTILLERY.

In common with the rest of the Royal Marines this force is under the Admiralty, receiving its orders from the Deputy Adjutant-General, Royal Marines, at headquarters.

Except as regards detachments for service, on board ship or elsewhere, the Royal Marine Artillery is concentrated at its headquarters, Eastney Barracks, Portsmouth, where, too, recruits and the whole corps are thoroughly trained in all the duties appertaining to naval ordnance. The marine artillery is armed with the rifle as for infantry, as also, it may be noted, are the blue jackets of the Royal Navy.

The relations of the Royal Marine Artillery with other troops in garrison, or on active service, are the same as in the case of the Royal Marines generally.¹

The uniform is almost identical with that of the Royal Artillery, there being a few minor differences such as the grenade on the forage cap, a slightly different knot on the cuff, &c.

For supply of officers see Chapter XVIII.

¹ See chap. viii., sect. 21.

CHAPTER XIII.

ROYAL ENGINEERS.

1. *Introduction and History.*

The title of "Engineer" is very ancient, and originally was purely military, a fact that is sometimes overlooked, in consequence of the name having been adopted in the last century by the members of a civil profession, now usually known as "civil engineers." But this application of the word is comparatively recent, and previously it applied exclusively to the body of officers who had the charge of the king's engines of war, and who were employed in the construction of fortifications and in the duties connected with their attack and defence.

In the middle ages, fortresses always played a most important part in every campaign, and it was necessary to retain the services of engineers in peace as well as in war. Thus we find that engineers were kept for the king's service long before the system of standing armies was introduced. The Royal Engineers can therefore claim a longer continuous history than any other branch of the British army, and Waldivus, who was the chief engineer of William the Conqueror, may be regarded as the father of it.

At that period gunpowder had not been invented, and the engines of war were of a very different description to those of later ages. Battering rams and various machines for throwing large stones and spears filled the place afterwards taken by cannon, while the miner had no explosives to assist him in destroying the walls of fortresses, which had frequently to be breached by burrowing under the foundations, thus causing the walls to fall by their own weight, a very hazardous operation for the besieger as well as for the besieged.

In the old records are to be found some interesting accounts of the military operations of the engineers in those distant times, but the space available in this work will only permit of giving a very brief history of the corps from its early beginnings.

In the middle ages, armies were raised for the purposes of a campaign and disbanded on its conclusion, and the artificers and labourers required for engineering operations were also taken on temporarily, sometimes in considerable numbers. For example, when Edward I. conducted the war in Wales in 1287, there were 2,000 wood-cutters and sappers (*fossatores*) employed with the army, and these men were of great service both in making roads, cutting paths through the forests, and assisting in the sieges of the Welsh strongholds.

The invention of gunpowder and introduction of cannon added another important item to the duties of the engineers, and special men had to be enlisted to work the guns. At the siege of Calais by Edward III. in 1347, the chief engineer was John Gruynard, who had under his command a body of 314 men composed of "Cementarii, Carpentarii, Fabri, Ingeniatores, Pavilonarii, Minarii, Armatores, Gunnatores, et Artillarii" (Masons, Carpenters, Smiths, Engineers, Tentmakers, Miners, Armourers, Gunners, and Artillerymen). As soon as Calais was taken, Gruynard was left as chief engineer to supervise the restoration of the fortifications and to take charge of the artillery left in the place. The siege of Calais is interesting as being the earliest at which there is a record of the use of artillery.

When Henry V. undertook the invasion of France in 1415, he instructed his chief engineer, Nicholas Merbury, who is called "master of the king's works, guns, and ordnance," to provide smiths and workmen for the expedition. One of the first operations undertaken was the siege of Harfleur, and the following is recorded as the ordnance corps employed—

Nicholas Merbury, Esq., with 21 foot archers.

Sir John Greyndon, with 120 miners.

Thomas Matthew and William Temple, with 124 carpenters.

John Bennet, with 120 labourers.

2 master-smiths and 12 smiths.

4 master-gunners, with 25 gunners.

50 servitor gunners, 6 wheelers.

The siege was vigorously contested and the engineers bore the brunt of it. After the town was taken Merbury accompanied the King to Agincourt, and received honourable mention for his conduct at the battle. In the campaign of 1417 no fewer than 1,000 masons, carpenters, and other labourers, were employed and did good service at the numerous sieges which had to be undertaken. It was, in fact, a campaign of sieges, and when the two fortresses of Cherbourg and Rouen fell, the first after an attack of three months, and the second after five months, the whole of Normandy submitted to the English King.

It is necessary here to notice briefly a very important office known as the "Office of Ordnance," and later as the "Board of Ordnance," which was gradually formed to take charge, on behalf of the king, of all matters

concerning fortifications, sieges, artillery, and stores. It seems to have been established in the Tower of London about 1455, and it continued to exist for exactly 400 years. The principal officer was termed the "Master of the Ordnance," who was assisted by the "Lieutenant of the Ordnance." In later years, when the office had greatly increased in power and importance, the chief officers became "Master-General" and "Lieutenant-General." The "Chief Engineer" was from early times one of the important officers of the ordnance. As the work of the department increased, additional officers were added, and, in the reign of Charles II, when very careful instructions were drawn up for the guidance of the officials, the *personnel* of the Board of Ordnance was composed as follows:—¹

The Master-General of the Ordnance.	The Principal Engineer.
The Lieutenant-General of the Ordnance.	The Master-Gunner of England.
The Surveyor-General of the Ordnance.	The Deputy Keeper of the Ar-
The Clerk of the Ordnance.	moury.
The Storekeeper.	The Keeper of the small arms.
The Clerk of the deliveries.	The Purveyor.
The Treasurer.	Clerks and messengers,

and at out-stations, under the orders of the Board, were the following officials:—

Engineers, master-gunners, firemasters, proof-masters, fire-workers, store-keepers, wagon-masters, tradesmen and artificers.

Although in this particular warrant the chief officer of the engineers is called "the Principal Engineer," it should be pointed out that this officer, both before and afterwards, was always called "the Chief Engineer," until the year 1802, when the title was altered to that of Inspector-General of Fortifications, which name is retained to the present day.

This is not the place to discuss at any length the history of the Board of Ordnance, but it is quite impossible to make the history of the corps of engineers intelligible without alluding to it. It must not be forgotten that when the Board was established in the fifteenth century it was the only permanent military office; the cavalry and infantry being raised on the commencement of a war and disbanded at the conclusion of it. The Board therefore, as was natural, acquired a very strong position, and when a standing force of infantry and cavalry was set on foot after the Restoration and placed directly under the king, or a general delegated by him for the command, there was a certain feeling of jealousy between these branches of the army and the officers of the engineers and artillery who depended upon the Board of Ordnance.

And now to return to the history of the corps of engineers at the middle of the fifteenth century, when the Board of Ordnance was first definitely established. In the reign of Henry VIII., the engineers had much important work to carry out. That active-minded King authorised a large and expensive scheme of fortifications for the defence of the English coasts,²

¹ See Colonel Cleaveland's notes, page 58.

² Portland Castle, Walmer Castle, and many others still or till recently extant, were built on the same design, which was one that showed a very marked advance on that of castles of the period just preceding.

and of the Scottish border. One of the most distinguished engineers was Sir Richard Lee, whose life presents many interesting features. He seems to have begun his career as a man-at-arms, and being in garrison at Calais devoted his leisure to the study of fortification and architecture. His talents were noticed and he was made an engineer and put in charge of the defences of the Thames at Gravesend. On the completion of these, he was sent back to Calais to improve the fortification of that town. After three years at that station he was recalled to England and appointed chief engineer in an expedition against Scotland in 1543. The year after, he was again ordered to France to superintend the siege of Boulogne. After an attack of two months' duration the citadel was ruined and blown up, and the place capitulated. The King was present and knighted Lee for his services, appointing him chief engineer over Boulogne, Calais, and Guisne. After the conclusion of the war with France, Lee, assisted by Rogers, another eminent engineer, was engaged on the delimitation of the boundary between the French and English territories, a duty similar to that which is so frequently nowadays entrusted to officers of the Royal Engineers. In 1546 Lee was again sent as chief engineer with a force against Scotland, and was given as a reward for his services a manor in Gloucestershire. During the reign of Queen Mary he was unemployed, but was recalled to the active list by Elizabeth, who sent him to restore the fortifications of Berwick, where he greatly improved the defences. After two years at that place he was ordered on a mission to Antwerp; and in 1560 built the castle at Upnor, on the Medway. In the same year he went with an expedition to Scotland, and, though getting on in years, made an excellent reconnaissance of the Scottish positions, for which the Duke of Norfolk, the general in command, specially mentioned him in his report to the Queen.

Sir Richard Lee died in 1575, after a very busy life, of which this brief sketch will serve to show the great resemblance between the service of an engineer officer in the sixteenth century and at the present time.

During the wars of the Revolution a large number of engineers were employed both in the Royal and Parliamentary armies; which was very natural, considering the extent to which the attack and defence of fortresses were carried on in the different campaigns.

Up to the beginning of the eighteenth century, the engineer and artillery services formed one corps. But experience gained during the campaigns of Marlborough showed that it would be of great advantage to have a permanent body of gunners instead of raising a train for each campaign, and in 1714 the chief engineer, General Michael Richards, recommended the formation of permanent companies of artillery and the reorganization of the corps of engineers. His scheme fell through for the time, but in 1716 he had been promoted to the office of Surveyor-General of the Ordnance, and, supported by Colonel Armstrong, who had succeeded him as chief engineer, he again brought the matter forward, and a formal application was made to the Master-General, then the Duke of Marlborough, for the establishment of four companies of artillery and for the reorganization of the engineers. The Duke agreed as regards the latter, but only recommended the formation of two artillery companies, which may be regarded as the basis of the present great regiment of Royal Artillery.

At the time the Royal Artillery thus commenced its separate existence the engineer corps was definitely composed as follows:—

1 Chief engineer.	6 Engineers extraordinary.
3 Directors.	6 Sub-engineers.
6 Engineers in ordinary.	6 Practitioner-engineers.

Although the engineer officers as a body had, as we have shown, formed a corps from early times, it was not until 1772 that a permanent force of non-commissioned officers and men was established, the men having, up to that time, been raised for service for each particular campaign. In the above year, however, Colonel Green, the chief engineer at Gibraltar, pointed out the great importance of having a permanent body of military artificers in that fortress, and, in consequence of his representations, a royal warrant was issued authorizing the formation of a company of soldier artificers. These proved themselves of the highest value during the great siege of Gibraltar, and were increased to two companies after the conclusion of the war. In 1787 a similar corps was first raised for service in England, and it is interesting to note that its establishment was strongly opposed in Parliament on the ground that "it was a dangerous innovation and was opposed to the most favoured principles of the constitution." But Mr. Pitt, then Prime Minister, and the Duke of Richmond, Master-General of the Ordnance, carried their proposals, and a corps of Royal Military Artificers was founded by royal warrant in 1787. The corps consisted of six companies, each of 100 men, which were commanded by officers of the engineers, who in the same year were styled "Royal Engineers." Some years previously, in 1782, the names of the different ranks had been altered to assimilate with those of the rest of the army, thus:—

<i>Old Title.</i>				<i>New Title.</i>
Chief engineer..	..	..	..	Engineer-in-chief.
Director	..	..	..	Colonel.
Sub-director	..	..	..	Lieutenant-colonel.
Engineer in ordinary	..	..	..	Captain.
Engineer extraordinary	..	..	..	Captain-lieutenant.
Sub-engineer	..	..	..	First lieutenant.
Practitioner-engineer	..	..	..	Second lieutenant.

In process of time, the title of captain-lieutenant was changed to second captain and afterwards to captain, and the title of captain to major.

The Gibraltar companies were amalgamated with the companies on the British establishment, and in 1806 the corps of military artificers was raised to 12 companies, and further, in 1811, to 32 companies. A couple of years later the name of the corps was altered to that of "Royal Sappers and Miners" which was retained until the amalgamation of officers and men into one corps in 1856. Up to that time, although the sappers were always commanded by the officers of the Royal Engineers, the two corps were officially distinct, an anomaly which can only be understood by tracing the history of both. While the corps of Royal Engineers had thus been gradually growing up, three similar but distinct corps had been raised for the service of the Honourable East India Company known as the Bengal, Madras, and Bombay Engineers. These also were united with the Royal Engineers in 1862, since

which date the corps of engineers has become one and indivisible in all parts of the British Empire.

From time to time new additions and augmentations have been made, which it is impossible to discuss for want of space. The following is a brief description of the corps as it now exists, and of its duties in peace and war.

2. Composition, Duties, &c.

The corps at present consists of 974 officers of all ranks, and 6,848 warrant officers, non-commissioned officers and men. This includes about 150 warrant officers and non-commissioned officers of the corps on the Indian establishment, and 215 warrant officers and non-commissioned officers and men, supernumerary to the establishment of the corps, specially employed.

Of the officers, 385 are specially employed for service in India, and the remainder for service in Great Britain and the colonies. Of the latter number, a certain proportion are attached to the regimental establishments, and the rest are employed on staff and engineer duties, and on the multifarious other employments, military and civil, upon which officers of the corps are from time to time engaged.

The officers of the corps, for the most part, are selected from cadets who have been educated at the Royal Military Academy, Woolwich,¹ but a certain small proportion of commissions are given to cadets from the Royal Military College at Kingston, Canada, several of whom have particularly distinguished themselves. After receiving their commissions, all officers are sent to the School of Military Engineering at Chatham, where they go through a further course of education lasting for about two years.² They are then posted to stations at home or abroad, usually, but not always, to troops or companies, and their services are always available for general engineering duties as well as for the special duties of the particular branch to which they may be

¹ For further details, see chaps. xviii. and xxv.

² *Ibid.*

attached, and they are liable to be transferred from one line of work to another at any time, in accordance with the exigencies of the service.

Officers for service in India are generally volunteers, but as regards other stations abroad, a roster is kept for each rank, and an officer is ordered abroad when he comes to the head of the roster, unless he is kept to complete some special duty, in which case his turn to go abroad comes on the completion of the duty.

The *regimental establishments* of the corps comprise the following units:—

Bridging battalion of 2 troops.

Telegraph battalion of 2 divisions.

Field depôt consisting of 2 field parks, a mounted detachment for service with cavalry, and a training depôt.

8 field companies, 4 of higher and 4 of lower strength.

Balloon depôt and section.

17 fortress companies.

1 native fortress company for West Indies and Sierra Leone.

4 survey companies.

2 railway companies.

12 submarine mining companies.

5 native submarine mining companies for Hong Kong, Ceylon, Mauritius, Singapore, and West Indies.

Coast battalion (11 sections).

8 depôt companies.

Instructional Staff at the School of Military Engineering, Royal Military Academy and Royal Military College, and at the Schools of Submarine Mining at Chatham, Portsmouth, and Plymouth.

Supernumerary staff, engineer services.

There are on the Indian establishment :—a Bengal and a Madras battalion, each of 6 companies, and a Bombay battalion of 4 companies; each of these having its own depôt of 1 or 2 companies. Also an Indian submarine mining company. The battalions are composed of and officered by natives, under the superior command of British Officers, R.E., with a few staff warrant and non-commissioned officers. The submarine miners have British officers and non-commissioned officers, the native *personnel* consists of Lascars.

The scope of *engineer duties* in war and in peace is laid down in the regulations for engineer services in the following terms:—

Engineer Services in War:—

- (a) All the engineering operations connected with an army in the field. Landing stages, roads, and bridges. Making and working of rail-

ways, telegraphs, and balloons. Preparation of camping grounds. Water supply, canals, field works, electric light, land mines. Attack and defence of fortresses, ports, and positions. Demolitions. Surveying. Defence by submarine mines and torpedoes.

(b) Such other engineer services as may be required.

Engineer Services in Peace :—

- (a) The charge and conservation of lands, stores, and unoccupied buildings the property of, or held by, the War Department.
- (b) The design, construction, and maintenance of all War Department works, buildings, machinery and accessories. Water, electric light, gas systems, and drains. Parades, roads, railways, canals, bridges, culverts, sluices, piers and groins. Fortifications and field works. Land and submarine mines. Torpedo and balloon factories. Torpedo installations. Electric and visual telegraphs and telephones. Surveys.
- (c) The working of military telegraphs and permanent signal stations, land and submarine mines, torpedoes, military railways, and balloons.
- (d) The preparation and custody of all plans, drawings, and documents connected with the above subjects.
- (e) Such other engineer services as the general or other officer commanding may direct.

Speaking in general terms, it may be said that the Royal Engineers serve the army in respect of all engineering work, taking the term in its widest sense. Their pride is to be equal to the occasion under all circumstances and never to allow themselves to be baffled by difficulties, whether foreseen or unforeseen. The work they do, and appliances they construct or instal, are sometimes for their own use but more often for the use of other branches of the service, who thus profit by their labours.

Their duties in time of peace may be considered under two heads.

I. Duties in connection with Engineer services.

II. Regimental Duties.

I. The chief officer of the corps on the headquarters staff of the army is called "the Inspector-General of Fortifications and Royal Engineers," who may be regarded as the direct descendant of the officer known for so many centuries as "the Chief Engineer" and whose position and functions have been briefly alluded to above at pages 236 to 239. The duties of

the inspector-general are laid down as follows :—

“The Inspector-General of Fortifications is charged, under the Commander-in-Chief, with the construction and maintenance of fortifications, barracks, store buildings, and the inspection of ordnance factory buildings; with military railways, telegraphs, and balloons; with the custody of War Department lands and unoccupied buildings; with the design, inspection, custody, and issue of engineer stores; and (in concert with the Quartermaster-General) with preparing the annual estimates for engineer services.

“As Inspector-General of Royal Engineers he advises as to the general distribution of the corps and as to the appointment of officers to, or their removal from, responsible positions in connection with works. He inspects the Corps of Royal Engineers, and advises on all questions relating to its technical instruction.”

He has under his orders, to assist in carrying out the above duties in respect of works, a certain number of officers termed :—

Deputy Inspector-General of Fortifications.

Assistant Inspector-General of Fortifications.

Inspector of Submarine Defences.

The staff for conducting engineer duties in the military districts at home and at colonial stations abroad is constituted as follows :—

To the staff of the general or other officer commanding a district at home, or a station abroad, is appointed an officer termed “the District Commanding Royal Engineer.” Under the instruction of the general or other officer commanding, this officer supervises and controls the engineer services in the command, which are conducted by officers of the Royal Engineers, officers of the Royal Engineer civil staff, military foremen of works, civilian foremen of works, military mechanists, submarine mining and other store-keepers, clerks, draughtsmen, and other subordinates.

For the better distribution and control of works, certain district commands are divided into sub-districts, to each of which is appointed an officer termed “the Sub-District Commanding Royal Engineer,” who conducts the engineer duties in his sub-district through the district commanding royal engineer under the orders of the general officer commanding, the staff necessary for carrying them on being placed under him.

The immediate charge of work in districts is further split up into different divisions, to each of which, when practicable, an officer of Royal Engineers is appointed, termed "the division officer."

The district commanding royal engineer in a subdivided district occupies a three-fold position. He is at once:—

An officer of the general staff;
Commanding officer of troops; and,
Inspecting officer.

As a staff officer he is responsible to the general for submitting questions to him properly prepared and with the engineering aspect of the case fully represented.

As a commanding officer he is charged with the general command of the Royal Engineers in the district.

As inspecting officer he inspects the Royal Engineers, including the Militia and Volunteers, and the engineer office books, records, and plans. He inspects works and buildings, both those existing and those in progress, and reports on them to the general officer commanding.

In an undivided district, he has the same duties as given above, and, in addition, the duties and responsibilities of a sub-district commanding royal engineer.

The sub-district commanding royal engineer commands the engineers in his sub-district, except at those stations where the Commander-in-Chief has specially appointed other engineer officers to command them. He commands the engineer civil staff, and is responsible through the district commanding royal engineer to the general for the efficient and economical execution of all engineer services in his sub-district, and for the administration and control of all funds allotted to him. He is responsible for the care of all stores placed in his charge, and for the carrying out of all duties connected with the proper performance of engineer services in his sub-district.

Division officers are responsible to the sub-district commanding royal engineer for the correct execution of all works allotted to them, for the way in which the subordinate staff perform their duties, for the administration and control of funds, and for the correctness of plans and reports put forward by them. Junior officers in a similar manner are each made responsible for a definite charge under the division officer.

The principal officers of the civil staff are surveyors and assistant surveyors, who are placed under the district or sub-district commanding royal engineer, and are responsible for the accuracy of estimates and specifications, the measurements of works measured by them, and the accuracy of the prices of bills.

It will thus be seen that there is a regular chain of responsibility for carrying out the various duties of the corps.

The senior engineer officer in Ireland is not termed "Commanding Royal Engineer" but "Chief Engineer." He is charged with the general supervision and control of the engineer services carried on in the command, but is a purely staff officer and has no executive responsibilities except in regard to lands.

The Royal Engineers are also a "spending department," entrusted with the administration of the funds appropriated for their services, making payments, by drafts on the station paymasters, and rendering their own accounts under the authority of the general officer commanding.

The above is a very brief *resumé* of the duties of the corps in peace, so far as these are divided from the duties in connection with troops and companies, the organization of which we will now describe.

II. *Regimental Duties.*—The various branches of the corps have already been enumerated at page 241, the strengths of those units which have different establishments in peace and war being shown in the table at page 252.

Their several duties are as follows :—

(a) *Bridging Battalion.*—In time of peace the troops of the bridging battalion are stationed at Aldershot and formed into one corps under a lieutenant-colonel, who also commands the field depôt and telegraph battalion.

The duties of the battalion comprise everything connected with the formation and maintenance of military bridges of all descriptions. In the war organization one troop is attached to the corps engineers of each army corps, and is provided with sixteen pontoons with wagons and four wagons packed with *matériel* for trestle bridging. Besides the manufactured bridging *matériel*, the troop carries the necessary tools, &c., for making bridges out of improvised stores, or for repairing permanent bridges which have been broken in the course of a campaign.

(b) *Telegraph Battalion.*—The organization of the telegraph battalion is somewhat different on the peace and on the war footing. During peace, it is composed of two divisions, of which the 1st is stationed at Aldershot and is employed for purely military telegraph work; it is provided with portable telegraph *matériel*, accompanies the troops in their manœuvres, and is constantly exercised in field telegraphic operations.

The 2nd division, while also an entirely military body, is attached to the postal telegraph service, and has charge of a large district in the southern counties of England, south of the Thames and the Bristol Avon. The officers and men, who are interchangeable with those of the 1st division, are thus thoroughly acquainted with the details of telegraph work on a large scale, and are therefore the more useful in time of war.

On mobilization, the 1st and 2nd divisions of the telegraph battalion are amalgamated, and a battalion formed, of which the headquarters and four

sections are attached to an army corps. From its peace training the battalion is able to take over and work any existing telegraphs in the theatre of operations, and is also supplied with the necessary *matériel* for establishing new semi-permanent or temporary lines.

In war, the telegraph battalion can be supplemented by men from the telegraph reserve referred to at p. 254.

(c) *Field Depot*.—The field depot is also stationed at Aldershot and forms a part of the engineer troops. It consists of two field parks, the mounted detachment, and a training depot. On the war establishment, one field park is attached to the corps engineers of each army corps, and the mounted detachment to the cavalry division of the 1st army corps.

The field park provides the apparatus for printing, photography, lithography, and other similar appliances, which have become indispensable as aids in the conduct of the business of military operations.

The mounted detachment is a comparatively recent institution. It accompanies the cavalry in the field, and is supplied with tools, explosives, and other necessary materials for destroying railways, telegraphs, bridges, &c., and for carrying out other engineering operations, where long distances have to be traversed, or difficult country, unsuited to the heavier vehicles of the field companies, has to be passed. In fact, this detachment, which will possibly expand in the course of time, bears the same relation to the field companies as the batteries of the Royal Horse Artillery do to those of the Field Artillery.

(d) *Field Companies*.—Four field companies of Royal Engineers are attached to each army corps on mobilization. Of these one company belongs to the corps engineers, and one forms part of each of the three infantry divisions. Each company is provided with tools, explosives, and the other necessary technical equipment to enable it to undertake any engineering operation that may be required, such as the construction of field defences, the attack and defence of field fortifications, making or destroying railways and roads, &c. A small section of bridging material is carried to enable streams to be crossed without bringing up the pontoon troop; it would provide 45 feet run of bridge for all arms, or 75 feet of light bridge for infantry. For the construction of field fortifications when large working parties are required, the field companies supply the superintendence and augment the tools which are carried in the battalion and division transport, while the bulk of the working parties would be supplied by the infantry. Of the eight field companies maintained in the British service, four are kept at a higher strength and would in case of war be immediately available: while the other four are of a lower strength and would need a larger number of reserve men to be attached in order to bring them up to war strength. The present distribution of the field companies is:—

Higher strength companies.—2 at Aldershot, 1 at Chatham, 1 at the Curragh.

Lower strength companies.—2 at Aldershot, 1 at Shorncliffe, 1 at the Curragh.

(e) *Balloon Section*.—The use of balloons has been established very lately in the British army, although the great advantages to be obtained from

their adoption have been recognized for some years by the European Continental powers. But notwithstanding this, the equipment which has been adopted in England compares very favourably, both in portability and facility of working, with the systems favoured by other nations. The balloon section, as well as the depôt, the school of instruction, and establishment for the manufacture of the balloons and gas for inflating them, which were first located at Chatham, are now at Aldershot. On mobilization, a section forms part of the corps engineers. It is provided with wagons for carrying the balloons, winding down gear, and other equipment, and with gas wagons, in which the hydrogen gas is stored in a compressed state.

(f) *Railway Companies*.—The two railway companies are stationed during peace, one at Woolwich, where it is employed on the construction and maintenance of the railways in the Royal Arsenal, and the second at Chatham, where it is stationed on the government line from Upnor to the Chattenden Barracks. On mobilization of a complete army corps for service abroad, both companies would be attached to the troops employed on the line of communications. For home defence, however, they would act as fortress engineers.

In war, these units can be supplemented by men from the railway reserve referred to at page 254.

(g) *Fortress Companies*.—These companies, as their name indicates, are specially organized for the work connected with the construction, attack, and defence of fortresses, but in field campaigns one or more, as might be required, would be employed at the base or on the line of communications.

At the present time there are seventeen companies, of which five are in the United Kingdom, and twelve at stations abroad. There is also a local company of native engineers for service in the West Indies and West Coast of Africa, of which the officers and higher non-commissioned officers belong to the Royal Engineers, and the rank and file are native troops.

(h) *Survey Companies*.—The Ordnance Survey of the United Kingdom has been one of the important duties of the corps of Royal Engineers since its first commencement in 1746, under Lieutenant-Colonel Watson and Lieutenant Roy, who were employed in making a map of Scotland to facilitate military operations, after the rebellion of 1745. The work moved very slowly, and it was not until 1783 that Roy, then a general officer, began the great trigonometrical survey which has formed the basis of the maps of this country.¹ The numbers of the corps employed upon it from time to time have varied, but at present there are four companies, of which the headquarters are at Southampton, Bedford, Clifton, and Dublin, and the total strength of Royal Engineers employed, is 24 officers, 361 warrant officers, non-commissioned officers and rank and file, in addition to which a considerable number of civilians are employed.

The work of the survey involves much responsibility. The companies are liable to be broken up into small parties scattered over the country, and the men have therefore to be specially selected.

(i) *Submarine Miners*.—The submarine mining companies of the Royal

¹ For a fuller account of the work of the Ordnance Survey, see chap. xxv.

Engineers are organized for the defence of British military and commercial ports at home and abroad by submarine mines and torpedoes, the distinction between these two engines of war being this—a submarine mine is a large charge of gun-cotton or other explosive, fixed to the sea bottom, which can be fired on the approach of a hostile ship, while the torpedo is a locomotive weapon fired from the shore (or from a vessel, or structure in the water), and so arranged as to explode on striking a vessel.

There are twelve submarine mining companies, stationed at present at the home stations of Portsmouth, the Isle of Wight, Plymouth, Pembroke, Gravesend, Sheerness, Chatham, Harwich, and Cork Harbour, and abroad at Bermuda, Halifax, and Malta.

In addition to these companies, composed entirely of British troops, there are five companies, partially British and partially native, stationed at Ceylon, Hong Kong, Jamaica, Mauritius, and Singapore.

In the submarine mining branch, as a great part of the duties of the men are upon the water, the working dress resembles that of a sailor rather than a soldier.

(j) *Coast Battalion*.—The coast battalion is composed of officers and men of the Royal Engineers, who are posted at the mercantile ports of Great Britain to assist in the submarine mining defences. At these ports the bulk of the forces for conducting these defences is taken from the volunteers or militia. The coast battalion is at present composed of 13 officers and 190 warrant officers, non-commissioned officers and rank and file. All the officers have received commissions from the ranks, and have been specially selected for their skill and aptitude for their duties.

(k) *Royal Engineer Depot*.—The depot of the corps and School of Military Engineering is at Chatham, where all the junior officers and men (except drivers and sappers of the troops, who join and are trained at Aldershot) have to join on entering the service, and receive a training in their duties as engineers. A description of the courses which they go through is given in Chapter XXV., p. 424. The depot is composed of a battalion of eight companies under the command of a lieutenant-colonel.

The field companies are not stationed abroad in time of peace, and the fortress companies are not often moved from station to station. *Foreign reliefs* are therefore usually made by drafts from the home companies to the companies abroad and between the latter, so as to move each man from station to station every three years, thus equalising the service between good stations, and others not so favourably regarded. As far as possible, men are brought home after completing seven years foreign service; companies in the United Kingdom are moved about every three years.

When a draft is required for a company abroad, volunteers of the trades required are called for from the com-

panies stationed at home, and as these are generally forthcoming, it is rarely necessary to order men to serve abroad who do not volunteer.

The foreign service of the submarine mining companies is conducted on the same principles ; also great care is taken to maintain the continuity of knowledge with the conditions of local defence at each station. It can easily be seen that it might be very prejudicial to the interests of the service to change a large proportion of any company at the same time.

Royal Engineers in India.—Although the officers of the Corps serving in India form part of the same regimental establishment, and are on the same list as those serving at home and at stations abroad, the duties are entirely distinct in many respects. A large proportion elect for “permanent service in India” and by so doing become entitled to higher pensions than can be earned by those who remain upon the English list. The total number of Royal Engineers allotted for Indian service is 385, including lieutenant-colonels, majors, captains and subalterns ; but of the last named a certain proportion, at present 35, are counted among the number of junior officers under training at the School of Military Engineering. The officers in India are employed in various staff appointments, in the military works department, in the public works department, on the survey of India, on railway work and other civil employments, and with the sappers and miners. Of these last there are three battalions,—one for each of the three Presidencies,—a company for service at Burma, and a submarine company of four sections, which has its headquarters at Poonah, and the sections at certain ports.

Militia and Volunteer Engineer Forces.—The Militia Royal Engineers are composed of two fortress battalions and ten submarine mining divisions which are stationed at the military ports and two of the commercial ports.

The Volunteer Royal Engineers are composed of nineteen battalions of fortress engineers, one battalion of railway engineers, and seven divisions of submarine miners, which are stationed at mercantile ports.

There is also a corps called “The Volunteer Engineer and Railway

Transport Corps," which is composed of officers only, who are all civil engineers, and managers and other officials of the railway companies of this country.

3. *Terms of Service, Arms, Pay, and Reserves.*

Recruits for the Royal Engineers are enlisted at any recruiting agency throughout the country. Those for the mounted branches are sent to the Royal Engineer training depôt at Aldershot, and those for the other branches of the corps to the depôt at Chatham.

The *terms of service* are at present as follows:—

- (a) For long service of twelve years with the colours and no reserve service.

(1) Men enlisted for appointments as military mechanists.

(2) Boys.

- (b) For short service of seven years with the colours and five years in the reserve, or three years with the colours and nine in the reserve.

Men enlisted for all branches of the corps except military mechanists, telegraph reserve, railway reserve, and submarine mining section of the reserve.

The above periods are converted into eight years colour and four years reserve service, or into four years colour and eight years reserve service, if the period of army service expires while the man is serving abroad.

- (c) For short service of three years colour and three years reserve service.

Men enlisted for the Royal Engineer telegraph reserve, railway reserve, and the submarine mining section of the reserve.

These are all men who are employed in the post office telegraphs, or in the service of the railway companies, and who are classed as "efficient volunteers" or efficient submarine miners attached to militia divisions. They are usually transferred to the reserve immediately on enlistment, and are only called up for army service in time of war, except the submarine mining section who attend an annual practice. The telegraph and railway reservists are discharged on ceasing to serve the post office or railway companies, or on ceasing to count as efficient volunteers.

All men who enlist for dismounted units of the Royal Engineers must have a trade, and are examined to prove their efficiency before being finally approved for service in the corps. A certain number of boys are also enlisted, some of whom are trained as buglers and trumpeters, and others at a trade, as blacksmith, bricklayer, or telegraphist.

The approved trades which are, at the present time, recognized in the Royal Engineers and at which a man may receive the higher rate of engineer pay are the following :—

Balloonists.	Farriers.	Printers.
Boat builders.	Fitters.	Riveters.
Boatmen.	Gasfitters.	Saddlers.
Bookbinders.	Instrument repairers.	Sawyers.
Brennan workers.	Joiners.	Shipwrights.
Bricklayers.	Lithographers.	Slaters.
Cabinet makers.	Masons.	Smiths.
Carpenters.	Moulders.	Steam machinists.
Collar makers.	Painters.	Stone-cutters.
Coopers.	Paper hangers.	Submarine miners.
Divers.	Pattern makers.	Surveyors.
Draughtsmen.	Photographers.	Telegraphists.
Electricians.	Plasterers.	Thatchers.
Engine drivers and erectors.	Plate-layers.	Turners.
	Plumbers.	Wheelers.

All men on joining at the *depôt* at Chatham are posted to one of the *depôt* companies, and are thoroughly trained at drill and (except men for training as submarine miners) in the construction of field works before being employed at their respective trades. They are also instructed in the use of explosives, in military bridging and pontooning and in other military duties belonging to the corps. While thus under instruction they receive a lower rate of engineer pay, and have to pass an examination and be classed as thoroughly efficient in military duties before being posted to service companies and employed at their respective trades.¹

In order that the men of service companies may keep up their knowledge of field fortification and other field works, each field and fortress company has to go through a course of annual training lasting 30 days, and every railway company through a field work course of 15 days. Men belonging to the survey companies also are put through a modified course of field works every alternate year. Every man in the corps must undergo an annual course of musketry.

¹ For further details with regard to the course of training, see page 424.

It may be noted that the men take a very keen interest in rifle practice during their leisure hours. Rifle clubs flourish in the corps, and although not usually strong numerically at each station, they are generally able to hold their own in rifle shooting competitions with the other branches of the army.

The *uniform* of the Royal Engineers is scarlet with blue velvet facings, and the *arms* are as follows:—

Bridging battalion	..	..	{	Mounted non-commissioned officers, pistol and cavalry sword.
Field parks	..	..		Drivers, pistol only. Dismounted
Training depôt	..	..		men, Lee-Metford rifle and
Field companies..	..	..		sword bayonet.
Telegraph battalion	..	..	{	Mounted men, cavalry carbine.
				Dismounted men, artillery carbine and sword bayonet.
Mounted detachment	..	..	{	Artillery carbine. Dismounted
				men have also sword bayonet.
Balloon section	..	..	{	Pistol for mounted men. Cavalry
				sword also for mounted N.C.O.'s.
			{	Artillery carbine for dismounted
				men.
Other units (dismounted)	..	..	{	Lee-Metford rifle and sword
				bayonet.

Pay.—In addition to their regimental pay, men of the corps receive “engineer pay” at rates varying from 4*d.* to 2*s.* per day according to their skill and qualification as artificers. Careful rules are laid down with regard to granting these rates of pay, and men are strictly examined before being raised from one rate to the next above it. The highest rate of 2*s.* is only granted under exceptional circumstances, the second rate being given to “very superior” workmen. In case of inefficiency or inattention to work sappers are liable to be reduced a rate of engineer pay; the intention being that no man shall receive a higher rate than that for which he is really qualified. In cases where men are under arrest or in confinement, or absent without leave, their engineer pay is forfeited. They do not draw the pay when absent with leave for the whole day, or if sick in hospital for the whole of the working hours of the day.

Reserves.—The present number of men in the Royal Engineer reserve is about 2,000 and it is steadily increasing. It is composed of—

(1) Men who have completed their period of colour service and have been transferred to complete their service in the reserve.

(2) Men specially enlisted for the Royal Engineer telegraph and railway reserve in accordance with the rules given above, at page 250.

(3) Men selected for the submarine mining reserve from the military divisions of submarine miners, and a limited number of approved civilians. For the latter the terms of service are the same as for the telegraph and railway reserve.

(4) The above does not include the militia reserve, which consists of men of the militia engineers who have served two trainings, have proved themselves efficient, and are of good character. Men are enlisted for the residue of their militia engagement.

The majority of the reservists are detailed to particular units, and on orders being given for mobilization, immediately join their units. In the case of men who are required to join units already abroad, men of the mounted branches rejoin at Aldershot, and dismounted men proceed to the dépôt at Chatham.

The men who rejoin units at home are armed and clothed at the places where these are stationed, and those who join for service with units abroad, are armed and clothed at Chatham or Aldershot, according to the branch to which they belong.

4. *Royal Engineers with an Army Corps. Duties in War.*

On the army corps headquarters staff, there will be a chief engineer with his staff.

With the army corps there will be a lieutenant-colonel with staff and—

1 pontoon troop

Headquarters and half telegraph battalion

Balloon section

1 field company

1 field park

} As detailed in table,
page 252.

With the cavalry divisions there will be a mounted detachment as detailed in table, page 252.

With each infantry division—

1 lieutenant-colonel and adjutant and 1 field company as detailed in table, page 252.

The total number of Royal Engineers with an army corps and a cavalry division are—

52 officers, and 1,529 warrant officers, N.C. officers, rank and file.

If two or more army corps take the field, there will be on the staff of the officer commanding the army an officer termed "the Engineer-in-Chief" who is charged with the effective distribution of the engineer arm; he arranges for the allotment of engineer stores provided for the army, supervises engineer services and deals with engineer questions generally. He is purely a staff officer and has no executive command.

The chief engineer of an army corps occupies a similar position as regards the administration of the engineer arm with the corps, as the engineer-in-chief does with regard to the entire army, and is also purely a staff officer.

Similarly when a division has to act independently there will be on the staff of the general officer an officer termed "the Staff Engineer" whose duties correspond with those of the "Chief Engineer" of an army corps and who has no executive command.

In campaigns, officers would also be appointed entitled "Director of Telegraphs," "Director of Railways," and "Director of Balloons," to take charge of these special services.

Although the engineer equipment provided with each army corps may be sufficient for ordinary operations, it is usual in the case of war to have to make special additional arrangements, which will vary with the nature of the campaign, the theatre of war, and other circumstances.

For example, let it be assumed that it is proposed to employ a force of two army corps, that the point of attack is 100 miles from the place where the army will be landed, that a strong opposition will be made to the landing, and that there is a railway leading from the place of disembarkation to the place to be attacked, and two rivers and several smaller streams lie between them.

In such a case it is probable that when the landing had been successfully effected, it would be found that

the port, landing places and wharves, had been damaged, the railway station destroyed, the water supply cut off, the railway and the bridges over the rivers and streams broken up. Probably it might be necessary to attack the objective point by siege.

The engineer services then, for which arrangements would have to be made and for which the necessary stores have to be taken, would be likely to involve:—

- The construction of landing places.
 - Repair and working of railway, and probably provision of rolling stock.
 - Repair and construction of telegraphs.
 - Provision of water supply.
 - Construction of storehouses.
 - Repair and construction of bridges and roads.
 - Defensive works to protect the point of disembarkation and line of communication; possibly also, defence of the port by submarine mines.
 - Siege operations.
 - Hutting the troops, or part of them.
- The stores required for these services would be classified thus—
- (1) Stores forming the equipment of the field units and accompanying those units.
 - (2) Reserve stores for those units.
 - (3) Stores which can be procured at the base of operations from the country itself.
 - (4) Special stores which have to be sent from England—
 - (a) With the first troops landing.
 - (b) To follow later.

It is the duty of the engineer-in-chief to prepare the list of stores in item (4), and to take the necessary steps for procuring them.

Great care has to be taken in loading the stores on board ship, so that they may be available in the order in which they are wanted; as also that the stores required at once on landing may be shipped in the same vessel as the engineer unit which has to use them.

It will be seen from the above brief sketch of the duties of the corps of Royal Engineers in war, that the success of any military operation depends considerably on the efficiency with which their duties are carried out, and on the preparation and training for war which they have had during peace.

CHAPTER XIV.

ARMY SERVICE CORPS.

1. *Purpose and Organization.*

A rough definition of the purpose of this component of the army would be, that it is instituted as a working corps to serve the army and supply the needs of its daily life. The corps is employed at home and in the Colonies but not in India.

Its prime duties are (1) holding and issuing of food rations for men and horses, and (2) providing transport services required by the army. The bulk of the corps is engaged on these duties. The corps also through its officers and a special staff has the charge of barracks, stables and their furniture, allots them to the troops, and issues and attends to the supply of fuel, light and water. Recently, in pursuance of the purpose of its institution, the corps has been given the duty of providing the *personnel* for the service of remount depôts; and, more recently still, that for the clerical work of the army so far as it is not done by regiments or units themselves.¹

The present *organization* of the Army Service Corps dates from 1870. The corps was formed by the transfer of non-commissioned officers and men volunteering from the cavalry, artillery, and infantry. It thus at the outset of its existence received a stamp of efficiency derived from the best qualities of these several branches, which has had a happy effect on its subsequent history. Throughout the many changes affecting the duties of its officers as a department and finally as a combatant body, the corps as represented by its warrant officers, non-commissioned officers and men has re-

¹ See also chap. xxi. (Supply and Administration).

mained unchanged except in minor details and has maintained its original characteristics. Previous to 1870 the Commissariat department, originally a civil branch, was responsible for supply,¹ and the Military Train, formed from the Land Transport Corps raised during the Crimean war, was charged with transport duties; prior to that war there existed no organized military service for either of these branches.

The corps is now classed as combatant, and its officers, with certain limitations applicable to those appointed before 1888, are regimental officers, available as such for the usual roster of garrison duties, and exercising such command as their seniority may involve.

The administration of the corps is vested in the Quartermaster-General under whose orders the Assistant Quartermaster-General, Army Service Corps, exercises the functions of a commanding officer at the headquarters of the corps, which are established at the War Office. The first duties of the corps being broadly divided into supply and transport, the warrant officers, non-commissioned officers and men are divided into dismounted and mounted branches. The strength of the former is some 950 and their depôt is at Aldershot; they consist of clerks, and tradesmen such as bakers and butchers, of varying ranks and acquirements, stationed at most military stations at home and abroad, and quartered with and attached to the companies, by detachments, large or small, according to local needs.

The mounted branch, some 2,200 strong, has its training depôts at Aldershot and Woolwich, and consists of service companies with a uniform establishment of fifty non-commissioned officers and men with horses and vehicles for transport.² These are distributed as follows:—At Aldershot 10

¹ A technical term signifying the provision, custody and issue of food, forage, and consumable supplies.

² The harness in use is that for universal service in the army; it can, with proper adaptations, be used equally well as shaft harness or for pole draught, and either as single, double, or four-in-hand; the simplest form is with the pole, with bridle reins, collar and traces. The collar is normally used, but breast harness is also employed indifferently. The breast strap is a broad heavy one, not to be confounded with that in use with the "auxiliary

companies, at Woolwich 6, at Curragh and Dublin 4 each, and in London, Shorncliffe, Devonport, and Portsmouth 2 each, while 2 companies are unequally divided between Chatham and Colchester.

In order to supply the war needs of an army corps abroad, with its line of communications, or of three army corps at home, the branch at present consists of 34 such companies. Each company is commanded by a captain, who has under him a subaltern and a warrant officer, and who, like the major of a field battery, is a direct accountant, for pay, clothing, and equipment, to the various departments concerned.

The army service corps being virtually a nucleus only for large expansion in war, for which its own reserve, now 2,400 strong, is the largest factor, the proportion of higher ranks is large. An establishment of 120 warrant officers gives good prospect of advancement to well educated men, a fair number of whom receive commissions as quartermasters or riding-masters. The sergeants and rank and file, in addition to rates of regimental pay slightly less than those of artillery and engineers, receive, under simple rules as to acquirements, extra (or "corps") pay varying from 3d. to 1s. 2d. daily. The supply and transport branches are maintained by direct enlistment, or by transfers from other branches of the army. Pay and prospects being good the number of men who offer themselves for service is such as to allow considerable selection to be made. Enlistments are for 3 years with the colours and 9 in the reserve, and considerable numbers extend their service and finally re-engage.

For those other duties which were referred to above, there are formed three distinct sections which provide the *personnel* for (1) the remount services, (2) barrack services, (3) clerical work of general staff offices.

For (1) an establishment of 130 non-commissioned officers and men is maintained, with pay and corps pay as for the transport branch, for the care of the animals in the depôts of the remount department at Woolwich and Dublin. Its numbers are maintained by men volunteering from all mounted services, who are willing to extend their service to 12 years with the colours. Promotion goes entirely within the section and its large married establishment is an inducement for older soldiers to join.

For (2) a section is formed consisting solely of pensioners or non-commissioned officers of over 18 years service—who have served in any branch of the army and who, wishing to keep touch with military life, can serve on in this branch until 60 or 55 years of age respectively. A large number (one in eleven) among those who are still serving as soldiers are of warrant rank, while increase of pay every five years rewards good service for the pensioners.

breast harness" supplied to cavalry, &c., for occasional use when extra assistance is required. See "Army Service Corps Drills and Exercises," and the "Instruction in Regimental Transport, 1892," price 1s.

In addition to these, barrack labourers are also employed in large numbers, being old soldiers who by education or otherwise are not fit for the responsible duties of the accounting and clerical work.

For (3) a section is in process of formation from which all clerks required in general staff offices whether for A duties or B¹ will eventually be provided. It will be formed by voluntary transfer from the corps of military staff clerks, hitherto a body without a real head in peace or home in war, and by appointing from time to time qualified non-commissioned officers or men from all branches of the service or from other sections of the corps itself. For a considerable time the clerks for B duties have been supplied by the army service corps and there will be but that one source of supply in future.

2. *Duties of the Corps in Peace-time. System of Command, &c.*

The duties of the army service corps may now be described a little more in detail.

(a) *Supply.* The daily rationing of the army in time of peace is effected at the various stations in one of two ways, (1) by contract with civilian firms who issue the provisions to corps, or into central stores under the superintendence of the army service corps, or (2) by the independent action of the corps itself. The first method is employed where garrisons are small but numerous in a district for convenience of administration, but could be used if necessary throughout; in the Colonies it is resorted to almost exclusively; the second obtains at the larger military stations at home, for the double purpose of training the army service corps tradesmen at the work they would have to perform in the field, and of accustoming the troops to the system that would prevail in war. Thus at Aldershot, Woolwich, Shorncliffe, Chatham, London, Dublin and the Curragh either bakeries or abattoirs, and in some cases both, are formed, where the bread is baked and the animals are slaughtered and dressed for direct issue to the troops. At Aldershot forage is purchased in the open market for issue by the corps, it being provided at all other stations by contract.

(b) *Transport.* The cartage of regimental baggage, of stores of every kind from place to place within the garrison, of equipment, tents, and fuel for use in camp, as well as the daily distribution of the rations where not delivered direct by contractors; the provision of all vehicles, with the necessary animals, and boats for inland water transport for the above purposes, is the duty of the army service corps.

Any mounted companies that may be at the station, supplemented by the regimental transport of the corps in garrison, meet the demand as far as may be; when insufficient, further means of transport are hired under local agreements. The actual work is superintended by mounted officers or others, who see that delay and loitering are avoided.

In each district or command is stationed a senior officer

¹ See chap. xx. (Staff).

of the corps who commands the warrant and non-commissioned officers and men in the district of every branch (except the remount companies who are dealt with by the officers of the remount department), as well as all officers of the corps at the station where he is quartered, and who is the channel of communication between other officers in the district and the headquarters of the corps. He is responsible for the supply and transport duties of his district, and trains the officers under his command by allotting definite portions of these duties to them. For barrack duties certain officers are detached to supervise the various subordinates and to carry out the periodical inspections. A variation occurs where the district is extensive; in such a case sub-districts are formed, within each of which one officer is responsible for all duties of the supply, transport, and barrack services. The whole of these duties in the district are superintended by the staff officer for B duties as described in Chapter XXI.

3. *Duties performed in War.*

As in peace so in war, supply and transport are the main duties of the corps. For these duties it is organized in war by companies, complete in themselves, for the supply and transport needs of the part of the force, or theatre of war, to which they are allotted. The peace company of the mounted branch is the unit of expansion, which is effected by increasing its numbers and by posting to it "supply" soldiers so as to form a self-contained unit in war.

We thus should have with one army corps serving in a foreign country¹

3 companies at the base,

2 on the line of communications,

1 at the advanced dépôt,

executing the general carrying requirements at busy points and charged with the receipt, issue, transmission, and account of supplies and stores.

Also 14 companies for duty with units of the fighting force; providing for their needs, and affording transport to the field hospitals and bearer companies, and 2 companies¹ to produce bread for the moving army in front; making 22 companies in all, supplemented by the mass of general hired trans-

¹ For details see Field Army Establishments, Service abroad.

port which the work at the base or the nature of the line of advance will generally necessitate.

For home defence on the other hand the whole of the transport of stores to main depôts near the army is left to be done by contract; the army service corps being limited to the distribution among the fighting units, for which 37 companies would be required.

With a company detailed for duty with a unit of the field army, either at home or abroad, four or five officers are detailed for the executive duties; the senior being responsible to the general officer commanding for all duties of the branch, but each performing definite duties in the direction of division of labour. For example, in a company with an infantry brigade, of the 4 officers employed one assumes charge of the supply duties for the brigade, collects or receives all food supplies, meat, bread, groceries, and forage, directs their distribution to the troops and accounts for the same, ensuring the maintenance of the reserves as daily exhausted. He is charged with the custody and employment of the miscellaneous equipment for killing and dressing meat by the butchers of the company. A second officer remains with and commands the headquarters of the company, carrying with him in his own transport all the equipment, baggage, tools, materials for repair, &c. required for the proper up-keep of his company. He arranges for the handiest distribution of the artificers by whom the vehicles of the regimental transport, as well as his own, are repaired and horses shod. A third is responsible for the men, horses, and carriages of the brigade supply column, and for the punctual performance of its duties; his column is the connecting link between the troops of his brigade and the nearest store or depôt in the field. The fourth in a similar way commands the section providing transport for the bearer company, receiving the medical officer's directions as to where the transport is required, ensuring its presence and efficiency, and giving all orders needed to give effect to the medical officer's wishes.¹

4. *Education and Training.*

Large depôts are established at Aldershot and Woolwich for receiving recruits and for their systematic training in foot-drill, musketry, riding, driving pairs and four-in-hand, stable management, and care of horses. In each service company, which these men join after some 3 months training, there are facilities for intelligent men to be instructed as cold-shoers, shoeing-smiths, carriage-smiths, wheelers and collar-makers, and at no time are there less than 100 men being so trained throughout the corps.

¹ For details generally see *Field Army Establishments, Service abroad*; and see also chap. xv. (Medical) for the duties in connection with that service.

The more skilful among them subsequently receive further instruction in their trades with the classes which are formed at the Artillery College or in the Royal Dockyard, Woolwich, qualifying them for appointment as artificers, or, on passing to the reserve, to provide the large numbers required on mobilization, over 100 being now thus available. In addition to the ordinary artificers required for company work, 74 are employed in certain government workshops at a high rate of extra pay, who are available to join their companies in case of war.

At Aldershot classes are formed in the corps' school of instruction, and in the veterinary school, for further education in useful matters; classes for field bakery and butchery are maintained throughout the year, and training is afforded also in transport and supply work to large numbers outside the corps, notably to the Royal Marines. The training of the junior clerks is carried out by employing them, whenever practicable for a few months at a time in the supply, barrack, or district offices to give them insight into the working of each branch. All clerks are similarly posted to various offices in turn; they are not trained for one branch only.

As regards the training of officers, in addition to the usual regimental matters, each officer as he joins at Aldershot goes through a course of instruction in purely army service corps subjects in the corps school, and, before promotion, is required to pass a technical examination¹ based on such instruction and on general experience. Garrison and veterinary classes are open to them, and annually a large number attend an exhaustive course of instruction in meat inspection at Edinburgh and elsewhere. Two officers at a time may also study at the staff college.

5. *Mobilization.*

Broadly speaking, mobilization means for the army service corps, concentration. Although scattered by detachments or by twos and threes throughout the kingdom, the order to mobilize should find every man aware of the post he is to fill, and the machinery in working order to send him there. For the mounted branch the system is a simple one. Mounted companies serve at definite stations as already explained, and, with a working staff, are self-contained, needing only numbers to expand to their war footing. These numbers are provided by its own reserve, supplemented from other sources by simple transfer; but for the dismounted branch we must enter into more detail.

The mounted company in peace has no supply establishment, but the war unit has its own complement of "supply"

¹ See Q.R., app. vii., syllabus F.

soldiers, large or small, according to its place in the field army. The "supply" soldiers are maintained at numbers for which employment can be found in peace, and are stationed not for facility of mobilization, but according to the peace requirements of the garrisons, large or small, throughout the country. To meet these dual needs the system obtains of posting each man, wherever he may be serving, to the company he would join in war, which pays him, clothes and equips him, holds his documents and is ready to receive him at any time without the delay and clerical work of a formal transfer. This system is a little cumbrous in peace but simplicity is gained on mobilization, just at the time that simplicity is wanted.

The men serving with the colours being thus provided for, the machinery for orderly utilization of the reserve may be described.

Each transport reservist is detailed when he passes to the reserve to the unit he will join in war, and the documents of those joining each company are kept distinct. On an order to mobilize, these documents, with the necessary rolls, are sent to the dépôt at Aldershot, and are ready for each man as he joins and for dispatch to his company as each batch is supplied with clothing and necessaries. The "supply" reservist is not detailed for any unit while in the reserve, experience showing that less delay is caused by posting him only after medical inspection, &c., has disclosed the real needs of the company. The company wants all its transport men and wants them early in order to be able to send for its horses; the supply men are not wanted at once, and, being of such numerous trades and qualifications, to send them early would mean sending in all probability more of one trade or less of another than were wanted according to casualties among those serving.

6. *Inspection.*

In addition to the annual inspections by the general commanding the district and at certain stations by the Inspector-General of Cavalry, there is a two-fold inspection annually of the whole corps.

(a) By an officer deputed by the Quartermaster-General, usually the assistant quartermaster-general, army service corps, who is chiefly concerned with the *personnel*, horses and equipment, and the uniform observance of the standing orders.

(b) By a senior officer of the corps selected by the Quartermaster-General with chief regard to the system of transport, supply, and barrack services detailed in the regulations for army service corps duties.

The report of each inspection is submitted to the general officer commanding who forwards it with his remarks to headquarters.

Periodical inspections by the staff officers charged under the general with the administration of army service corps duties insure also the regular and intelligent working of each office in the district.

The number and character of the periodical inspections enumerated will serve to give some idea as to the variety of the duties of the army service corps, duties it may be added which are faithfully and zealously performed.

CHAPTER XV.

THE ARMY MEDICAL STAFF AND THE MEDICAL STAFF CORPS.

1 *Historical.*

THE necessity of one "skilled to heal" being present with armies in the field was early recognized, and references to this fact are to be found in the classics. Up to the 16th century, the value of military surgeons was gradually being acknowledged, but the temper of the times in regard to their encouragement may be estimated from what we read in Gore—"The poorer soldiers when severely wounded were discharged with a small gratuity to find their way home as best they might:" this practice prevailed, as based on the principle that "it cost more to cure a soldier than to levy a recruit."

At the time of the formation of a standing army and towards the end of the Stuart period, the ranks of the medical officers were—regimental mate, hospital mate, regimental surgeon, apothecary to a general hospital, surgeon to a hospital, surgeon-general. A distinction of some importance between a physician and a surgeon was also made at this time and existed till the middle of the eighteenth century, so much so, that not unfrequently during Marlborough's campaign in Germany we read of the Commander-in-Chief promoting a surgeon to be a physician, and as late as 1764 Brocklesby wrote how necessary it was that the military surgeons should be educated as physicians.

The two services, naval and military, were not so distinct during this period as they are now. Sir Thomas Longmore in his "Life of Wiseman" writes:—"Officers of all branches of the military service, and of all ranks occasionally held commissions for sea service at one time, and at another time for service on land."

During the campaigns of Marlborough it was generally considered effeminate to be ill, but eventually the terrible battles of that time and the fever-stricken countries in which operations were carried on gave the fighting man the benefits to which he was entitled. At that period the clever administration, indomitable courage, and perseverance of the senior medical officer, Sir John Pringle, kept the medical service prominent, and, under the greatest difficulties, proved absolutely the necessity for the presence of a proper

proportion of the relieving element to the fighting strength. Medical officers then and until 1796 not unfrequently held double commissions and could act in the double capacity of captain and surgeon.

Sir John Pringle, the surgeon-general serving with the troops under Marlborough, initiated the system of regimental, field, and general hospitals, and he records that after the battle of Fontenoy on the 11th May, 1745, a general hospital was opened at Ath, which took in upwards of 600 wounded. In the same war a general hospital was opened at Ghent which received 1,500 sick and wounded.

The first assignment of medical officers and their hospitals to an army in the field, in anticipation of their being used, was in the Peninsula. Sir J. McGrigor, afterwards director-general, was the principal medical officer. The idea was that every regiment should take care of its own sick, and in this way the crowding of large numbers in the general hospitals was avoided. This scheme answered its purpose then, as is proved by the fact that in the interval between the siege of Burgos and the battle of Vittoria (some ten months) the total number of sick and wounded passed through the hospitals was 95,348, yet by the assiduous care of the medical officers there were only 5,000 sick on the eve of the battle, the ranks being recruited by convalescents who had been properly treated and returned to their duty.

This war produced many improvements which were, however, chiefly confined to the interior economy and administration of general and regimental hospitals, while the organization, *personnel*, and general character of medical establishments scarcely underwent any change. Indeed there was at this period no ambulance corps in the British service corresponding with the Medical Staff Corps of the present time. A corps called the "Royal Waggon Train" was organized in 1812 for general transport and commissariat purposes. Wagons with springs were specially designed, as part of its equipment, for the carriage of sick and wounded men. It afterwards proved defective, and it was broken up in 1833.

On the outbreak of the Crimean war the "Hospital Conveyance Corps" was originated. This corps was for the most part recruited from military pensioners and other non-effectives. Their duties were to carry the wounded from the battle-field to places of safety, and to supply general and other hospitals with attendants so as to prevent drawing on the effective ranks; they also had to take charge of the transport and to furnish servants for the officers of the general medical staff of the army. This establishment failed, owing, amongst other reasons, to the total want of training of the men of the corps for such varied service, to their not having been accustomed to work together, to their loss of activity from age, and their general drunken and disorderly habits, indeed, before the actual hostilities had commenced, fresh men were enrolled and a new system organized. The medical staff officers overlooked in a general manner the work of the Hospital Conveyance Corps, but there was no system of command, and neither discipline nor authority could be directly enforced by them. In the beginning of 1857, after a short interregnum when the Land Transport Corps carried out the duties connected with the executive of military hospitals, there was practically no ambulance system. There were physicians and surgeons

attached to corps, and there was a general medical staff service, but there was no cohesion, nor organization which would work; this was moreover, impossible for many reasons, not the least important of which was the absence of medical supplies and appliances. It must be observed that the transport of the sick, which the Land Transport Corps had undertaken, was only one of the functions of a medical corps; the other and most important duties—viz., those of the conveyance of the wounded from the field of battle on stretchers, and of attending the sick and wounded in hospitals, still remained to be provided for in other ways, but as the military medical officers had no connection with the Land Transport or any other corps, this provision was rendered more difficult.

The regimental orderly system, which had been in existence since the days of the Peninsular war, worked fairly under the regimental surgeons; but it was open to disadvantages which rendered it necessary that the sick attendants generally should be supplied from other sources.

By royal warrant, June 11, 1855, the first Medical Staff Corps was organized. It consisted of nine companies each 78 strong, and arranged so as "to be employed in any way that may be required in the performance of hospital duties." There was scarcely any military feature in its organization; this fact alone materially facilitated its downfall, which occurred three months later, notwithstanding the provisions of a second warrant; the Army Hospital Corps was organized in its place on September 20, 1855. The failure of the Medical Staff Corps was mainly due to the doubtful and anomalous position in respect to its relations with the combatant authorities. The men of the corps for the most part acted in hospitals under medical officers who were not invested with military authority, and who had no power of awarding punishment for offences; in a considerable proportion of their numbers, they were undrilled and untrained in the strict requirements of discipline, and this was not so only as regarded the men of the corps, but also the stewards and ward-masters, under whose supervision the duties were performed, though having the relative rank of non-commissioned officers, neither wore the ordinary distinctions of those ranks on their uniforms nor had corresponding powers of command. The Army Hospital Corps possessed a complete military organization. The ranks were filled for the most part by the transfer of men of good character from regiments after a certain term of service, usually two years. Each man transferred had to pass a probationary period of three months in a military hospital before he was permanently appointed to the corps.

In 1858 a Royal Commission under the presidency of the Right Honourable Sidney Herbert was ordered to report on the regulations affecting the sanitary condition of the army, the organization of military hospitals and the treatment of the sick and wounded. The report of this commission was of the greatest importance to the medical service leading to improvement in efficiency and in the status and position of its officers. Through its means two fundamental changes

were introduced—the remodelling of the department and the organization of a practical army medical school.

From this period a great tendency to improve the condition of military medical affairs became manifest.

The regimental system (or that in which medical officers were an integral part of the regiment) which had existed for so long a period and was still in force, though it had been of great service in the past, was found to be incompatible with the development of the army medical service. In consequence in March 1873, a royal warrant devised by Mr. Cardwell, then Secretary of State for War, abolished the regimental system and placed all medical officers in one staff or department.¹ This was followed by a second warrant of the same date which organized the Army Hospital Corps for extended duties in connection with hospital service. Two new ranks of officers were created—viz., “Captain of Orderlies” and “Lieutenant of Orderlies”, while the rank of apothecary to the forces, dating from 1854, was abolished. In the same year it was directed that military hospitals should be organized and administered either as general hospitals, station hospitals, or field hospitals: regimental hospitals ceased to exist.

In 1877 authority was given to medical officers to command the officers, non-commissioned officers and men of the army hospital corps, and also all patients in military hospitals as well as soldiers attached to them for duty.

In 1881 the captains and lieutenants of orderlies were gazetted as quartermasters, army hospital corps, and placed on the same footing as regards pay and retiring allowances as quartermasters of infantry.

In 1883 a committee under the presidency of Lord Morley was appointed by the Secretary of State for War to

¹ Up to 1889 the officers of the army medical staff doing duty with the Household Troops were purely regimental officers, but subsequent to that date no officers have been gazetted to the junior ranks, these being filled by medical staff officers attached for duty; the surgeon majors of regiments are, however, still regimental officers, and as vacancies occur officers of the general list will be gazetted to fill them.

inquire into the organization of the army hospital corps, hospital management, and nursing in the field. Several valuable recommendations were made by it, among which were, undivided control of hospitals to be vested in medical officers, the medical service of the household troops to be assimilated with that of the army, opportunity to be afforded for the practice in peace in the use of war equipment both as regards bearer companies and field hospitals, and the assimilation of the army hospital corps with the army medical department, both of which were to wear the same uniform.

In 1884¹ officers of the army medical department and the quartermasters of the army hospital corps were designated the Medical Staff, and the warrant officers, non-commissioned officers, and men of the army hospital corps were designated the Medical Staff Corps. This organization still obtains.

On the Army Service Corps² now devolves the duty of supplying transport for the medical department; the transport officer of the army service corps taking orders from the medical officer commanding the bearer company or field hospital to which the transport is attached.

In 1889 a committee under the Earl of Camperdown was appointed to inquire into the pay, status, and conditions of service of the medical officers of the army and navy, and in 1891 there was promulgated a Royal Warrant altering in some respects the designation of the departmental ranks of the medical staff, and providing for the grant of sick leave to officers of the medical staff on the same conditions as those which are applicable to regimental officers. By this warrant the substantive titles of the officers of the medical staff were laid down as follows:—

Surgeon-major-general.

Surgeon-colonel.

Brigade-surgeon-lieutenant-colonel.

Surgeon-lieutenant-colonel.

¹ A. C. 182 of 1884.

² See chap. xiv.

Surgeon-major.
Surgeon-captain.
Surgeon-lieutenant.

These titles were to carry precedence and other advantages attaching to the rank indicated by the military portion of the title, but with limited command.¹

2. *Organization.*

The officers of the army medical staff comprise a Director-General, and a fixed establishment of administrative officers consisting of 10 surgeon-major-generals, 24 surgeon-colonels, and 50 brigade-surgeon-lieutenant-colonels, who, though executive officers, are available for administrative duties. There is no fixed establishment for each of the remaining ranks of executive officers, but the total number averages 763. There are also 35 quartermasters.

The medical staff corps consists of 36 warrant officers, 336 staff sergeants and sergeants, and 2030 rank and file.

The director-general is, under the Commander-in-Chief, the responsible head of the department and is charged with the administration and command of the army medical staff and medical staff corps; also of the militia medical staff and corps, the militia reserve of the medical staff corps, and the medical establishments of the army, including the army medical reserve of officers, besides the volunteer medical staff and corps, and the nursing service.

The surgeon-major-generals, and surgeon-colonels act as principal medical officers in charge of the medical administration of districts and commands. In certain smaller districts brigade-surgeon-lieutenant-colonels perform these duties as senior medical officers. The remaining body of officers perform the executive duties at all stations at home or abroad. The warrant and non-commissioned officers and

¹ The army rank conferred on medical officers facilitates the performance of the duties of command and discipline now imposed on them. Where the military command of soldiers is involved the possession of a military title is convenient for common parlance, and it enhances the officers' authority.

men of the medical staff corps are under the command of the officers of the army medical staff.

3. *Terms of Service. Transport, Arms, Inspection, and Mobilization.*

Officers.—The full conditions of service in the Army Medical Staff are laid down in the royal warrant for pay and promotion, but briefly stated they are as follows:—An officer after three years full pay service as surgeon-lieutenant, if favourably reported on, is promoted to the rank of surgeon-captain, and after twelve years full pay service including at least three years abroad, and having passed a satisfactory examination, is promoted to the rank of surgeon-major. A surgeon-major is promoted, if recommended, to surgeon-lieutenant-colonel after twenty years full pay service. All promotions to the fixed establishments of the higher ranks are governed by seniority tempered by selection with due regard to ability and merit. The regulations as to the full pay, half pay, and retired pay of the different ranks are laid down in the royal warrant for pay, &c. The regulations as to the first appointment of medical officers will be found in Chapter XVII.

Men.—A recruit desiring to enlist in the Medical Staff Corps must be able to read and write and must produce a certificate of good character from his previous employer. He must be from 18 to 28 years of age, from 5 ft. 3 in. to 5 ft. 5 in. in height, and of minimum chest measurement and weight of 33 inches and 115 lbs. respectively.

Enlistment is for seven years army, and five years reserve service, or three years army, and nine years reserve service, at the option of the recruit, which periods of service will be respectively converted into eight years army, and four years reserve service, or four years army, and eight years reserve service if the period of army service expires while the man is serving abroad.

The regulations as to regimental pay, the additional corps pay which the men ordinarily receive, and the extra duty pay given them under special circumstances are laid down in the royal warrant for pay, &c.

The *transport* for all hospital establishments is carried out by the army service corps. For detail of *personnel* see "Tables of Bearer Companies and Field Hospitals."

The *arms* of the medical staff corps are a short sword bayonet. The equipment is as for infantry, but with the valise pattern of 1882. All recruits go through a special course of musketry. On field service the medical staff corps is supplied with arms and ammunition in the usual manner. It should be added here that if England were fighting a nation under the terms of the Geneva Convention, the medical staff corps would be strictly neutral and would not be in possession of arms or ammunition.

The *inspection* of the medical staff and corps is carried out half-yearly by the principal medical officer of the district. He inspects and receives reports of the officers of the army medical staff serving under him, and satisfies himself that they are efficient in all the details of their duty. He also

inspects the hospitals, and examines into the interior economy. He renders confidential reports on the officers serving in his district annually through the general officer commanding, after inquiry into their military and professional efficiency.

Mobilization.—The general idea, as far as medical arrangements are concerned, is that there should be preparation made for the reception of 20,000 wounded in London (the scheme is already prepared in detail), and that medical officers and men for the various units, field hospitals, and bearer companies, for three mobile army corps should be detailed and ready for immediate mobilization.

This has been done, and tables are now issued showing in detail how the arrangements are to be carried out. In addition, each general officer commanding a district is directed to prepare a scheme of defence for such district with the forces and equipment, civil and military, at his disposal. All arrangements are made with a lighter scale of equipment than for foreign service, it being assumed that the campaign would be very brief, and no tents or heavy field equipment are arranged for.

The details as to the *personnel*, equipment, and various steps to be taken on mobilization are to be found in the tables of Field Army Establishments and Home Defence tables. A pamphlet will shortly be issued with Army Orders giving "Instructions for the organization and distribution of the Army Medical Staff, Medical Staff Corps, and Militia and Volunteer Medical Staff Corps on mobilization for Home Defence."

4. *Militia Medical Staff Corps, Volunteer Medical Staff Corps, Medical Reserve of Officers, and Medical Staff for West Coast of Africa.*

There is a body of 1,200 non-commissioned officers and men of the militia reserve who are annually trained in the duties of the Medical Staff Corps, and by royal warrant, dated 6th June, 1891, the formation of a *Militia Medical Staff Corps* has been approved. This corps when raised¹ will comprise the ranks of surgeon-major, surgeon-captain, surgeon-lieutenant, sergeant, corporal and private, who are to receive pay and allowances as laid down in Regulations for Militia, 1893.

Another large and important auxiliary to the medical staff corps is furnished by the volunteer service.

Ever since the commencement of the volunteer movement, medical officers have been attached to each volunteer corps or battalion, but by Army Circular, Clause 59 of 1886, a royal warrant was published which provided that with a view to the further development of the medical organization of the volunteer force, a corps to be designated the *Volunteer Medical Staff Corps* should be formed.² This corps comprises the following ranks:—surgeon-lieutenant-colonel, surgeon-major, surgeon-captain and surgeon-lieutenant, quartermaster, first and second class staff sergeants, sergeant bugler, sergeant, corporal, bugler, private. Like other volunteer corps, the

¹ One company is already formed, the Hants Company Militia Medical Staff Corps.

² See chap. xxiii., p. 382.

volunteer medical staff corps has a permanent staff from the regular army, consisting of an adjutant, who is a surgeon-captain of the army medical staff, an acting sergeant-major, and sergeant-instructors, who are non-commissioned officers of the medical staff corps.

Originally the volunteer medical staff corps consisted of only one division¹ in London, but there are now companies in Edinburgh, Woolwich, Manchester, Maidstone, Leeds, Aberdeen, Norwich, and Glasgow.

Since the organization of volunteer infantry brigades in 1888, a brigade-surgeon has been appointed on the staff of each brigadier-general, who is responsible to the director-general through the principal medical officer of the district, and has under his orders the regimental surgeons of the several corps forming the brigade. Under this system also brigade bearer companies have been formed. These are composed of men taken from the fighting ranks, no provision having as yet been made for volunteers to qualify as efficient otherwise than through the usual training and drill with their corps, and they are only trained in ambulance work as a secondary duty.

By royal warrant dated 18th February, 1888, an *Army Medical Reserve of officers* was established. In the Secretary of State's instructions on this warrant it was laid down that medical officers of the militia, yeomanry, and volunteers, on electing to join this reserve, should undertake to perform any duties at home at the rates of remuneration laid down for civilian medical practitioners in the royal warrant for pay, and that officers of the army medical reserve would have a prior claim to employment in the district in which they reside, to other medical officers of the auxiliary forces or to civilian medical practitioners.

The medical officers on the retired list who are liable to be recalled to service are shown in the quarterly Official Army List, as is also the army medical reserve of officers of the ranks from surgeon-lieutenant to surgeon-lieutenant-colonel. Promotion is given regularly according to length of service on fulfilment of the prescribed rules.²

Candidates for service in the army *Medical Staff on the West Coast of Africa*, enter under the same qualification as for the army medical department generally, except that they may be admitted at a later age. They are required to complete three years' service on the coast, after which they will be eligible for general service. For each year's service on the coast an officer is entitled to a year's leave at home on full pay, and each year or portion of the same served on the coast reckons double towards voluntary retirement on retired pay.³

5. *The Nursing Service.*

The nursing service is divided into three grades:—

- (1) Lady superintendents.
- (2) Senior nursing sisters (or acting lady superintendents).
- (3) Nursing sisters.

¹ The term division is now changed to company.

² Royal Warrant for Pay, &c., 1892, arts. 523A to F.

³ *Ibid.*, arts. 350, 351, and 441-3.

A candidate for the appointment of nursing sister must not be under twenty-five or over thirty-five years of age, and must produce an extract from the register of her birth, or, in default, a declaration made before a magistrate by one of her parents or guardians giving her exact age. She must also produce a recommendation from some person of social position, not a member of her own family, as to her standing in society, and also some testimony as to her possessing the tact, temper, and ability qualifying her for appointment. She must further sign a declaration showing whether she is single, married, or a widow, and whether a member of any sisterhood or society. She must produce a certificate of health and also evidence of having had at least three years preliminary training and service combined in an approved civil hospital, where adult male patients receive medical and surgical treatment, and in which a staff of nursing sisters under a matron is maintained. She must further produce certificates of efficiency in medical and surgical nursing from the medical officers under whom she has served.

Nursing sisters are retired after the age of sixty years on a pension. If disabled in the service before that age, the amount of pension or gratuity is regulated by their length of service. They are rationed and allowed a uniform free of all expense, and also certain allowances for washing and attendance. They are placed under a strict discipline, their duties being very fully defined, and the lady superintendent, or the acting lady superintendent, is responsible to the principal medical officer for their work being properly carried out.

Nursing sisters serve abroad, and are detailed for foreign service by the director-general, as far as the exigencies of the service will permit, according to a roster.

In mentioning the nursing service, the never-to-be-forgotten services of Miss Nightingale cannot be omitted. This gallant lady, with the assistance of a number of trained lady nurses, rendered invaluable service to the sick and wounded soldiers of the army during the Crimean war. She has since identified herself with numerous philanthropic organizations and her name has become a household word.

6. *Purpose and Duties in Peace.*

The existence of a body of military medical officers, and of a corps of trained orderlies and sick attendants, is essentially necessary. It is more particularly so to the British army, owing to the varied conditions under which that army is called upon to serve.

The duties of the medical staff comprise :—

- I. The general treatment of the sick, officers, men, women and children.
- II. The careful observation and regulation of the
• sanitary surroundings of the soldier, bearing in

mind the various conditions of service in climates of widely varying character. The prevention as well as the treatment of disease.

III. The examination and passing of recruits for the army.

IV. The invaliding of men who are medically unfit for further service.

V. The management and control of the various classes of hospitals.

(1) General hospitals.

(2) Station hospitals.

(3) Hospitals on board ship.

(4) Lunatic hospitals.

(5) Hospitals for women and children.

VI. The supervision and control of all officers and men, both patients and those doing duty in these various hospitals.

VII. The command, discipline, and interior economy of the medical staff corps.

With reference to sub-heading No. II., above (sanitation), in these days of progress and improved education, a knowledge of sanitary science and of the ordinary rules for the preservation of health is almost universal among all classes. The duties, consequently, of a medical officer in advising his general or other commanding officer upon sanitary questions is much lightened and facilitated, old prejudices are disappearing, there is less friction, and both commanding and medical officers understand each other on these points and work together for the common good of the soldiers. It is the practice to place medical officers in immediate charge of the troops in certain sections of a garrison. By this means, if not changed too frequently, they become acquainted with the localities and with the several commanding officers, between whom and these medical officers it is very desirable there should be frequent periodical communication, whereby the interests of the service are best compassed.

Junior medical officers are not placed in actual charge of regiments on home service, though in India this is sometimes done. The adoption of the station hospital system has rendered the old system in this respect unnecessary, though it is undoubtedly a fact that it would be most desirable for young officers to be attached regimentally for a fixed period, and then gain an insight into regimental ways, and the inner working of the soldier's daily life, as a good preparation for the responsible duties referred to in the previous paragraph.

General Hospitals are organized for the reception of invalids from India and abroad, the sick of corps at the station, and all entitled or specially authorized to be admitted into military hospitals. There is also separate and special accommodation for sick and wounded officers. The general hospitals in England are:—The Royal Victoria Hospital at Netley, and the Herbert Hospital at Woolwich.

Station Hospitals are established for the reception and treatment of sick from all corps in garrison, auxiliary troops when embodied, and all other persons who may be admitted under special sanction. Each is commanded by a medical officer appointed by the director-general, usually a surgeon-lieutenant-colonel or a surgeon-major, subject to the general officer or other officer in command of the troops at the station. An establishment of officers of the medical staff, and warrant officers, non-commissioned officers and men of the medical staff corps, is provided for each hospital according to its requirements. Station hospitals are equipped according to schedules laid down. Under certain conditions they are non-dieted.¹

Hospitals on board ship are organized and conducted similarly to non-dieted station hospitals, the equipment in each case being placed on board by the Admiralty.

Lunatic Hospitals are only established in connection with general hospitals, and are administered under special regulations. They are subject to the authority of the Commissioners of Lunacy.

Hospitals for Soldiers' Wives and Children are organized and administered as station hospitals. These special hospitals are much assisted by the kindly interest taken in them by officers' wives and other philanthropic persons. They are not wholly maintained by government, and special funds

¹ In dieted hospitals, the patients are fed according to a special scale of diets (see Appendix 3—Army form 1203—Part I, Regulations for Medical Services).

Non-dieted hospitals are met with in some barracks where the station hospital is some distance off. They are called "auxiliary" or "convalescent" hospitals, and contain a few beds for cases of accident, or the like, and an inspection room where the medical officers in local charge can examine soldiers or others who report themselves sick.

for their support are raised by voluntary contributions, and valuable assistance given both in money and kind.

7. *Medical Duties in War.*

In time of war the duties of medical officers and the medical staff corps are as a rule of an exceptionally arduous and responsible nature. A large proportion of the warfare in which British troops are engaged is in tropical and unhealthy countries, against savage and warlike nations, to whom the Geneva Convention and the courtesies of modern warfare are unknown. Consequently sick and wounded men cannot in case of emergency or retreat be left to the care of the enemy, but must be carefully guarded and treated and removed to a place of safety, as if abandoned it would only be to torture and death.

The arrangements for medical assistance with an army in the field¹ are:—

A medical officer with each unit, regiment, body of artillery, corps, or staff. This officer has at his disposal the trained regimental stretcher bearers, two per company or troop.

To each brigade a bearer company is attached and there is one field hospital.

To each division an additional field hospital is allowed.

For an army corps the medical establishments consist of ten field hospitals and six bearer companies exclusive of the regimental aid. In addition to this a certain number of officers of the medical staff are utilized for staff purposes, and are shown in the lists of field establishments.

With a cavalry division, which is considered separately from the army corps, there are two bearer companies and three field hospitals.

The entire medical service is under the command of a surgeon-major-general who is included with the staff of the general commanding the line of communications, and subject to the authority of the general commanding-in-chief.

When a soldier falls wounded in the fighting line he is reached and attended to as quickly as possible by the medical officer attached to his regiment or corps. He is carried or assisted to the collecting station and handed over to the bearer company.

The collecting station is the advanced post of pack animal ambulance transport and the various forms of wheeled carriage. It is usually in charge of a non-commissioned officer who has a small supply of restoratives for the more seriously injured. To this point all the wounded are conveyed and are

¹ For *personnel* of the medical service in the field, see "Field Army Establishments."

placed on the transport vehicles, to be passed on to the dressing station about 1,500 to 2,000 yards from the fighting line.

The dressing station is specially adapted for relieving the most seriously wounded, restoring those who are exhausted, and for performing the *necessary* operations. It is provided with a tent and medical and surgical panniers. The staff consists of two or three officers of the medical staff, according to the requirements, and ten non-commissioned officers and men, including a cook. The transport of and attendance on the wounded from the fighting line, through these two posts of succour, is performed by the bearer company. These two stages comprise the "First Line of Assistance."

From the dressing station the wounded are passed by road or railway to the field hospital which is placed in some suitable position beyond the range of fire or under cover from it. There is here provision for men to remain two or three days if necessary, and they may be either discharged to duty again or passed to the base hospital along the line of communication. The duration of the transit depends on the distance of the fighting line from the base, and the nature of the transport used. This forms the "Second Line of Assistance."

When the distance is great, "*Hospitals on the Line of Communications*" are formed and the journey of the sick and wounded is made by stages to the base. The base hospital is formed usually at or near the port of embarkation for England, and consists of a large staff with every possible appliance for care and treatment of the wounded. This forms the "Third Line of Assistance."

Invaliding boards are held regularly at the base hospital, and the wounded and sick are either returned to the front or sent home, and with the object of meeting the requirements, hospital ships are equipped so that the soldier lacks nothing to give him the fairest chance of recovering from the effects of climate or injuries.

The last stage is disembarkation in England, and transfer to the Royal Victoria Hospital at Netley, or some other hospital.

One most important fact must be noted and that is the much greater distance now, in contrast to recent days, between the fighting line and the dressing station. The carriage of a man 10 to 12 stone, these distances, over rough and uneven ground requires bearers of good physique.

The introduction of smokeless powder, and the increased velocity and range of rifle fire, will doubtless greatly modify the arrangements for the removal of wounded from the field. Various theories have been propounded, but so much depends on the tactics and methods of attack that may be found practicable under the new conditions that only practical experience is likely to show what will be the best system for ambulance work.

CHAPTER XVI.

THE ORDNANCE STORE DEPARTMENT AND CORPS. CORPS OF
 ARMOURERS. MILITARY MOUNTED AND FOOT POLICE.
 ARMY SIGNALLERS. ARMY POST OFFICE CORPS.

THE ORDNANCE STORE DEPARTMENT AND ORDNANCE STORE
 CORPS.

1. *Purpose, Duties, Conditions of Service, History.*

Under the orders of the Director of Artillery, the Ordnance Store Department provides the equipments to maintain the army and the armaments of works in a state of efficiency, the Ordnance Store Corps assisting in their care and distribution.

These duties may be thus summarized:—To provide, receive, hold, issue, and account for, munitions of war required for all branches of the army, and all military stores; clothing for use in camps, and clothing and necessaries for use in the field; also all barrack, hospital, and military prison stores, and to hold the reserves of the same.

Until lately it was also the duty of the department to maintain munitions of war for the navy, at all naval stations. In 1891 the Admiralty established a Naval Ordnance Department; but the duties for the navy at foreign stations are, at present, still performed by the Ordnance Store Department.

For the performance of these duties, each military command is furnished with an ordnance store establishment, having the necessary staff of officers, with clerks, artificers, and labourers of the corps, supplemented by civilian labour, for conducting correspondence, repairing the equipments, and moving the stores. Offices, workshops, storehouses, and magazines, are provided in proportion to local needs.

The commissary-general of ordnance, Royal Arsenal, Woolwich, superintends the maintenance of the grand reserves of munitions of war and of stores, by contracts made by the War Office, or by orders on the ordnance factories, and supplies to all military centres (except in India), on the demands of the "senior ordnance store officers," the proportions locally re-

quired. The stores are received and held on charge in each command by the assistant store officer. This officer is technically known as "the ordnance store officer in charge," and on him devolves a personal and pecuniary responsibility for the proper care and appropriation of the equipment consigned to him.

To guide the department in providing equipment, as well as all those indenting for the same, a "Priced Vocabulary" of the articles included in army equipment (clothing excepted) is published by the War Office, together with the "Regulations for the Ordnance Store Services," and the "Regulations for the Equipment of Her Majesty's Army."

The department, as now organized, has very much of its executive work performed by civilian subordinates, paid with reference to the wages of the labour market, and wearing no distinguishing dress, or badge, to mark them as Government *employés*.

The ordnance store corps furnishes a large proportion of the clerks and artificers, also a few of the ledger-keepers and labourers, but storeholders and foremen are almost exclusively civilians, and at Woolwich the entire storehouse and out-door establishments are composed of permanent civil labour, with a certain number of pensioners and reservists, to whom preference is directed to be given. Pensioners are eligible for employment up to 45 years of age, and may continue serving until the age of 65.

To supplement the number of trained ordnance store corps subordinates at all large ordnance store depôts, and still more so at Woolwich, there must always be a nucleus of permanent storeholders, ledger-keepers, and foremen, not liable to sudden removal.

As now organized, the ordnance store department, to which is affiliated the corps bearing the same generic name, consists of a body of officers, having the numbers, classification, and titles detailed below, viz. :—

1 commissary-general of ordnance, bearing the honorary title of colonel, stationed at the Royal Arsenal, Woolwich.

5 deputy commissary-generals of ordnance, with honorary rank of colonel, posted to the most important districts and stations, as "senior ordnance store officers."

30 assistant commissary-generals of ordnance, with honorary rank of major, and after five years, with the honorary rank of lieutenant-colonel. Many

of these officers are "senior ordnance store officers" of districts and stations. An officer (lieutenant-colonel) of this grade is posted at the War Office, as "assistant to the director of artillery" in all ordnance store questions.

54 deputy-assistant commissary-generals of ordnance, holding the honorary rank of captain, unless they already hold the substantive rank of captain in a combatant branch of the army. As the last-named officers rise in the department, they will have army rank instead of the honorary rank held by the older officers, who joined under earlier royal warrants.

12 regimental officers, temporarily attached until vacancies occur in the establishment.

24 quartermasters with honorary rank of lieutenant if under 10 years' commissioned service, and captain after 10 years' service.

The establishment of the Ordnance Store Corps is 857 of all ranks, organized in 9 service companies, each of 50 warrant officers, non-commissioned officers and men; the remainder are attached to a depôt company with its headquarters at Woolwich.

There are also 30 warrant officers styled "conductors," nominally attached to the companies as staff, but actually performing general departmental duties in minor posts in the ordnance store establishments. The class of "conductors" was created by royal warrant in 1879 for the performance of subordinate departmental duties. Being warrant officers their position is superior to that of all non-commissioned officers.

The ordnance store corps enjoys special advantages in its "corps pay," and in the facilities given to artificers for keeping up their trades. The conduct of the members of this corps, as a rule, is excellent, and to their credit it should be recorded that they have the highest standard of education in the army, as shown by the comparative numbers of first class certificates, gained by the different branches of the service.

The terms of service for the corps are the same as for cavalry, artillery, and infantry.

This department and corps are available for service in all home and colonial commands, except in India, where a department exists, and based on the old Field Train Department of the ordnance, specially organized for that country and its dependencies.

Historical.—For the origin of this department and corps we must go back many hundreds of years. From an early period in our history, the care and provision of arms and military stores were committed to lieutenants of counties. The master-bowyer, master-fletcher, master-carpenter, master-smith, &c., were salaried, and styled officers of the ordnance.¹

In 1456, in the reign of Henry VI., the ordnance office was created, and the first Master-General of the Ordnance commissioned. The ordnance office

¹ From "Notes on the early history of the Royal Regiment of Artillery," by Colonel Cleaveland, R.A., p. 1.

was moved by order of Henry VIII. in 1532, from Whitehall to the Tower of London.¹

The duties of the "master of the ordnance" in the field, as laid down in the reign of Elizabeth (1578), were essentially those of the senior ordnance store officer with a field force at the present day, as regards the maintenance of military equipment.

And, again, the "instructions" of 1683 are practically those of the present ordnance store department, so far as munitions of war and military stores are concerned; but going beyond them, inasmuch as they included instructions for engineer services, and for the training of gunners, also instructions for firemasters, proofmasters, and wagonmasters.

These instructions remained unchanged for many years, being ratified afresh by each succeeding sovereign.

From the Department of the Ordnance,² by successive developments, have been evolved the present Royal Regiment of Artillery, the corps of Royal Engineers, the ordnance factories, and the military transport service, as well as the department which is the subject of this chapter.

In December, 1825, a royal warrant was issued to govern that part of the civil establishment of the ordnance, known as the "store branch" of the War Office. Its officers were styled "ordnance storekeepers," and were permanently located at stations. This warrant continued in force until 1857, shortly after the Crimean war, when this "store branch" gave place to the "military store service," commonly called the "Military Store Department." The officers were styled "military storekeepers," were of various grades, and movable from station to station.

Previous to 1857 there was for the supply of warlike stores on active service a field train department, under a commissary of ordnance, which accompanied an army in the field, and was attached to the Royal Artillery. The field train in the Peninsular war had a numerous staff of officers, but in 1852, after the long peace, a mere nucleus remained. It was hastily strengthened for the Crimean war, by volunteers from the ordnance storekeepers, and retired artillery officers, and a number of artillery sergeants were appointed conductors. This train supplied all artillery field equipment, and the reserves of ammunition—carried on mules—for infantry, besides arms, accoutrements, and other fighting gear. It also supplied clothing and necessaries to the artillery, and its commissaries had charge of the siege parks, taking their orders from the artillery officer in command.

A further and important advance occurred in 1861, when the civil establishment of the army, known as the "military store department," was reorganized, placed under the Director of Stores, and its officers given commissions under Her Majesty's sign manual. Their titles were, "superintendents of stores," in various grades, with relative military rank. The warrant

¹ It became afterwards the "military store office," but the time-honoured name "ordnance office" was revived in 1876, when the offices of the ordnance store department were authorized to be so called.

² See chap. xiii. for a fuller account of the ordnance, and the evolution referred to; and for other allusions to the office of ordnance see chaps. xii. and xxiv.

of 1861 also established the subordinate class of "military store clerks," ranking as sergeant-major and sergeant, selected from army pensioners. This class of clerks has since disappeared, but it may be considered as the forerunner to some extent of the corps subsequently formed in 1865, under the title of Military Store Staff Corps, officered by military store officers.

In 1869 the military store department and military store staff corps were absorbed in the great Control Department with its Army Service Corps. On the break-up of "control" in November, 1875, the department again emerged into independent life as the Ordnance Store Department, the corps retaining for some years longer the title of "army service corps," but in 1877 the four companies doing ordnance store duties were separated from the supply and transport companies, and styled the "ordnance store branch" of the army service corps.

In January, 1880, the present organization of the department was introduced by a royal warrant, which divided it into a superior section, recruited from the officers of the army, who retain their army rank; and a subordinate section of commissioned officers of the rank of quartermaster. The bulk of the then existing officers were retained for the due performance of the duties, and honorary rank was granted to them in February, 1885.

In 1881 the title "army service corps" was abolished, and the companies performing ordnance store duties were designated "the ordnance store corps," which title they now hold. A new "army service corps," has since been organized for the performance of the duties formerly entrusted to the commissariat and transport.

2. System of Command and General distribution of Companies.

The Ordnance Store Department and Corps are, in common with the rest of the army, under the general orders of the Commander-in-Chief, the Director of Artillery at the War Office being their official chief at headquarters.

The Commissary-General of Ordnance, at the Royal Arsenal at Woolwich acts under the immediate orders of the director of artillery, and is not attached to any military district. He

performs, however, for the neighbouring garrison of Woolwich as well as for the home district, the functions of the "senior ordnance store officer," who, in all other military commands is immediately under the orders of the general commanding, and is an officer of the district or station staff.

The senior officer of the department with an army in the field is on the staff of the general of communications, performing his duties under the orders of that general.

The commanding officer of the ordnance store corps is an officer of lieutenant-colonel's rank, in immediate command of the companies at Woolwich. He is assisted by an adjutant, who is a captain.

Officers of the department are eligible for the command of companies and detachments of the corps, but can exercise no command outside their own department and corps.

The Ordnance Store Corps has its general headquarters at Woolwich, where, too, the headquarters of the *depôt* company is stationed. The service companies are distributed as under :—

Three at Aldershot, two in Ireland, one at Woolwich, one in Egypt, one in the Mediterranean, and one in the North-western District.

The *depôt* company at Woolwich finds all detachments for stations in the United Kingdom and the Channel Islands, except those named above. There are 23 of these stations. In addition, 11 foreign stations are furnished with detachments.

Reliefs are carried out, not by detachments, but by individuals. Service abroad is for three years at tropical stations, and five at others; but service abroad may be extended, if desired by the men. Vacancies at foreign stations are filled up by volunteering, or by roster in the absence of volunteers.

The corps is recruited by transfers from other corps, or by direct enlistment. The latter is only resorted to when sufficient transfers are not available. The qualifications for transfer are, one year's service at least, age under 30 years, and to be unmarried. At the end of a probation of three months, a man if unfit for departmental duties can be returned to his corps. Transfers may be made, and recruits enlisted at any station where a detachment is serving, but recruits are sent to the headquarters at Woolwich for training.

Expansion in time of war is provided for by the army reserve, on the strength of which there are, at present, 220 men who have passed out of the ordnance store corps. As men cannot be trained to ordnance duties rapidly, the reserve available will certainly not be considered in excess of probable

requirements, if it be borne in mind, that the length of line of communications, and the number and size of store depôts in a theatre of war, cannot be determined beforehand with any degree of certainty.

3. Education and Training of Officers and Men ; Ranks, Pay, Arms.

Under the regulations now in force, officers are drawn from the combatant branches to recruit the department.

On joining, as "temporarily attached," they are at once posted to the various establishments of the department, and learn their duties by taking part in the general routine of work. Selected military store officers serving under the royal warrant of 1861, went through a course of instruction in the manufacturing departments at Woolwich arsenal, which was most advantageous, and the discontinuance of the courses, on the formation of the Control Department, was a retrograde step.¹ An attempt was made about 1886, to revive them, and a few officers were instructed, but a succession of classes could not be maintained owing to the numerical weakness in officers of the ordnance store department.

In order to give young officers some experience in the nature of field service requirements and how to meet them, it is now the practice to attach these officers, so far as they can be spared, to the camp of exercise at Aldershot, an excellent

¹ In the event of young officers being appointed to the department, direct from Woolwich and Sandhurst, as is in contemplation, they would be required to go through a special course of training at Woolwich, before taking up their duties. For this purpose a syllabus has been prepared, to guide a course of instruction, under the Director of the Artillery College, in the most important of the munitions of war, as a preliminary to a more extended course of instruction, under a selected ordnance store officer, in the various duties of the department. Young officers posted to the ordnance store companies would be specially instructed in their military duties, under the direction of the officer commanding the corps.

The proposed system would have the advantages of securing the services of officers several years earlier than at present, and at an age when application to details is more readily given. It would also ensure a regular technical training, now to a great extent wanting, and would determine the officer's departmental career from the commencement of his military life. At present his final transfer to the department can remain a matter of uncertainty for a period of ten years, according to the election he may make, either to return to his corps, or remain in the department if favourably reported on.

arrangement both for imparting knowledge, and ascertaining the capacity of individuals.

The training of the ordnance store corps in military drill, barrack duties, and interior economy, is carried out by the officer commanding the corps. The smiths and wheelers are instructed in the shops of the artillery college, at the Royal Dockyard, Woolwich. The collarmakers, saddlers, and saddle-treemakers are trained in the shops under the direction of the superintendent of inspectors of saddlery, harness, and other general stores, also at the Royal Dockyard. Clerks are specially instructed in all clerical details, including requisitions, vouchers, and ledger-keeping, at their several stations.

The non-commissioned officers and labourers of the corps who are not clerks or artificers, are placed in the storehouses and magazines, to learn the important duties of storeholders and foremen, or to act as packers, issuers, and ordinary labourers. A syllabus of instruction has been prepared, for the guidance of all concerned in the instruction of the non-commissioned officers and men in their technical duties.

Each recruit before he is dismissed drill goes through a special course of musketry training.

The ranks and rates of pay of the ordnance store corps, as has been shown, compare very favourably with those of other branches of the service. Corps pay, of which there are five rates—viz., 1s. 2d., 11d., 8d., 6d., and 3d. per diem, is allotted partly with reference to the work performed, and partly for seniority, but the total number participating in each rate cannot exceed a certain fixed percentage of the establishment of the corps.

The warrant officers and staff sergeants are armed with swords, and, in war with revolvers in addition. The sergeants and rank and file at present carry carbines of the Martini-Henry pattern with sword bayonet, and when equipped for active service each man would have twenty rounds of ball cartridge in his pouch. All below the rank of staff sergeant have the infantry valise equipment, but with one pouch only instead of two. In general appearance and equipment the men of this corps closely resemble the garrison artillery, and they carry the same arms. They may be distinguished from artillery by the red centre in the yellow band of the cap, the scarlet facings on the sleeves of the blue tunic, the absence of yellow braid, and the double narrow red stripes on the trousers.

4. *Mobilization and Organization for Service.*

To place the ordnance store corps in readiness for an immediate *mobilization* of troops, service companies are maintained complete in numbers at Aldershot, Woolwich, and other home stations named in Section 2.

The *personnel* of the department and corps required with troops in the field at the base of operations and depôts, and on the line of communications, has been carefully tabulated. A comparatively small part is attached to the various staffs, the bulk being distributed, for the executive

duties of the department, at the base, the advanced depôt, and the intermediate stations along the line of advance and communication.

It is evident that in the absence of knowledge of the theatre of war to which troops might be sent, any estimates of numbers of officers so required can only be based on general principles.

The arrangements for mobilization for home defence are not fully defined—a forthcoming edition of *Field Army Establishments* will show them. The character of the arrangements will be :—

Senior ordnance store officers of districts will send officers and men of the corps to each mobilization store depôt, where stores are held at the headquarters of units in the field army, to issue the war equipments. Temporary assistance will be sent from Woolwich, when necessary, to each district. The officers and men will return to their original stations on completion of this duty, unless otherwise ordered from headquarters. Officers and men, as detailed in the *Field Army Establishments (Home Defence)* will join the staffs of the army corps, infantry divisions, and cavalry brigades, of the field army. Detachments will be sent to open up store depôts within certain coast defences, where no such depôts at present exist, as well as to open up field depôts for ammunition, &c., at certain railway junctions, or at other suitable points between the troops in the field and the central store depôt at Woolwich.

Organization for Service.—The details are given in *Field Army Establishments (Service abroad)*. They show that the senior ordnance store office is with the general of communications, with a staff of officers, non-commissioned officers, and men at the base, and at stations on the line of communications. The department would also be represented on the staff of each division, but not with smaller bodies.

For home defence the corresponding information would be found from time to time in the *Field Army Establishments (Home Defence)*.

The ordnance store officers posted at the various depôts are under the command of the commandants of the depôts, and receive their orders from them.

5. *Inspection.*

All ordnance store establishments are inspected periodically by the Director of Artillery or by an officer acting in his behalf.

Local inspections of various kinds are enjoined by the regulations for the conduct of the ordnance store services, and may be briefly referred to thus :—

By, or in behalf of the senior ordnance store officer, to compare ledger balances with the actual stock held by the “ordnance store officer in charge.”

By the senior ordnance store officer, of storehouses, workshops, magazines in the district.

By a board of officers under the orders of the general commanding, annually, of the stores in each ordnance store reserve depôt, to ascertain their general condition and quantity.

By the Royal Engineers, quarterly, of ordnance store buildings.

By naval officers appointed by the Admiralty, periodically, of stores for submarine mining, electric firing, and torpedoes, in ordnance store charge.

By officers of the staff for the inspection of warlike stores, from time to time, of ordnance, gunpowder, guncotton, fuzes, tubes, and other munitions of war, in charge of the ordnance store department.

Further it is in contemplation to provide for a methodical inspection under general officers commanding, of the first and second regimental equipments held by the ordnance store department for immediate issue on a general mobilization.

The companies and detachments of the ordnance store corps in districts are inspected annually by the general commanding the district. The officer commanding the corps also inspects all detachments numbering over 20 men. Smaller detachments are inspected by the senior ordnance store officers of districts under the orders of the general.

CORPS OF ARMOURERS.

(1) *Purpose and Duties.*—Armourer-sergeants are attached to battalions, to regiments of cavalry, and to the ordnance store corps¹ at certain stations, for work in repairing, browning, and examining small arms and machine guns, and for such minor repairs to the metal work of accoutrements and equipment generally as is within the limits of their trade or capabilities, having regard to the special instruction they have undergone.²

The armourer-sergeants attached regimentally perform work, within working hours, for other corps which may be unprovided with artificers; or, such may be executed by the armourers attached to the ordnance store department.

Twenty³ armourer-sergeants are localized at certain stations at home, to each of which a circuit comprising two to nine stations is assigned, chiefly regimental district depôts or others having no armourer attached. Under the orders of the general commanding, they visit the stations in turn to do such work as is required, taking their tools and materials with them and finding there an armourer's shop to work in.

¹ Armourer-sergeants are also provided for arsenals in India, in addition to those required for regimental units in that country.

² See Q.R., sect. vii., para. 211, &c.

³ Equipment Regulations, sect. xiv., and Royal Warrant for Pay, &c.

(2) *Organization.*—The corps of armourers is under the command of the chief inspector of small arms at Enfield Lock factory. The estimated establishment of the corps numbers 318, including a quartermaster. Of this number ten are sergeant-majors (warrant-officers), the remainder are staff sergeants or sergeants, except ten privates.¹ The depôt of the corps, where the men first join, is at the Royal Small Arms Factory, Bagot Street, Birmingham, the officer in charge of which commands the depôt. The supply of men is from civil life, or by transfer from other corps or regiments, the qualification in each case being that they should be gunsmiths by trade. From being privates of the corps men are promoted sergeant after obtaining a certificate of competence from the commanding officer, as result of a four to six months course of training at the depôt. During this course, besides having practice in tempering springs, and fitting the components of small arms, stocking, &c., the privates are taught to execute small forgings, to repair swords and horse-furniture, and also the mechanism, care, and repair of machine guns.

(3) *Terms of engagement.*—Armourers enlisted for the corps are engaged for "long service," i.e. twelve years. "Transfers" have their services extended to twelve years. They may re-engage after 9 years' service if found after most careful inquiry to have maintained their character for conduct and sobriety and to be careful and satisfactory workmen.

CORPS OF MILITARY POLICE, MOUNTED AND FOOT.

(1) *Purpose and duties.*—This body performs the police duties in large garrisons and camps, both in peace and war, thus obviating the withdrawal of effective soldiers from their legitimate duties with regimental units. The mounted branch provides for the patrolling duties in the vicinity of the military stations at which they are quartered. The foot branch is concerned with the internal regularity of quarters or camp.

With an army in the field the military police are especially useful in preserving that good order and abstinence from pillage or oppression so dear to the best traditions of the British army. In action they bring up the rear, and are able to render invaluable assistance in attending to stragglers and followers, and in securing that the service of attention to the wounded is unimpeded.

It is not too much to say that had such an organization existed in our older campaigns, much of the disorder we read

¹ The ten privates estimated for cover the recruits under instruction.

of as occurring when places were captured would have been prevented.

(2) *Organization*.—The mounted and the foot branches form separate corps, having a common depôt and headquarters at Aldershot under a provost-marshal, who is the commanding officer of the two corps.

There is an assistant provost-marshal at the Curragh ; at all other stations where there are detachments, they are under the immediate orders of the officer of the staff in charge of A duties.

(3) *Terms of engagement*.—The corps are kept up by the transfer of soldiers specially selected from the mounted branches and infantry respectively, who must have served four years, and have extended their period of army service.

ARMY SIGNALLERS.

The ordinary organization is regimental : each unit of cavalry, garrison artillery, and infantry has its establishment of signallers. But for extended operations a special organization of signallers is required for army purposes, and to meet this requirement the creation of special companies of dismounted signallers is provided for in the scheme of mobilization.

Each of these special companies consists of 2 officers, 2 sergeants, and 30 rank and file ; one company is attached to each army corps. The *personnel* is drawn from the regimental signallers, the officers being selected for their proficiency in signalling, and the equipment is kept ready in store.

One of these companies was mobilized in 1890 and was employed in connection with the summer drills at Aldershot.

A mounted company of the same strength is organized in a similar manner.

ARMY POST OFFICE CORPS.

The Army Post Office Corps was started in 1882 prior to the Egyptian campaign, when it was considered advisable to make use of the services of such officers and men of the Post

Office Volunteer Corps as were willing to join the new corps, and who could be spared from the service of the Post Office.

Altogether 100 men were enlisted, of whom 43 were kept in army service for the campaign, the remainder being passed at once to the reserve.¹ The term of service was arranged to be 3 years army service and 3 years reserve service, but no man was to be kept in army service longer than six months after the cessation of hostilities. The men were liable to be transferred to the reserve at any time during their period of army service. All serve on the condition that they are discharged when they cease to be "efficient" volunteers, or when they cease to be employed in the Post Office.

There were on the 1st April, 1893, 111 men serving—81 in Section B, and 30 in Section C, Army Reserve.

On the mobilization of an army corps 2 officers and 43 men will be employed as follows :—2 officers, 7 non-commissioned officers and men with the staff of the army corps, 4 non-commissioned officers and men with each of the 3 infantry divisions, and a like number with each of the 6 infantry brigades.

¹ Compare the terms of service for telegraph reserve, Royal Engineers, on p. 250.

CHAPTER XVII.

ARMY CHAPLAINS', JUDGE ADVOCATE GENERAL'S, ARMY PAY, AND ARMY VETERINARY DEPARTMENTS.

ARMY CHAPLAINS' DEPARTMENT.

1. *Religion in the Army.*

IN the army, as in the country at large, all religions are tolerated. On joining the service every soldier is invited to declare to what religion or denomination he belongs, and thereafter his attendance at public worship in his own communion is facilitated as regards special occasions, and on Sunday is made obligatory.

One of the services at the garrison church, and at such parish, or other, churches or chapels, as may be arranged, is recognised as a "parade service"; and officers and men are paraded and marched to it; so that under ordinary circumstances, parties from each corps may be seen every Sunday morning marching to their several places of worship. Services are also, but unfrequently, except when on active service and on the line of march, conducted in the open air. In English regiments the principal parade is the Church of England; in Scottish regiments, the Presbyterian; and in some Irish regiments, the Roman Catholic.

In the sister service, the navy, in the case of ships in commission,¹ where all hands live in a small area, morning prayers are read daily by an officer of the ship, or by a chaplain when one is present. The early custom of the army in 1662, and for some years, was apparently the same, but its observance now is prevented by considerations of time, space,

¹ And also in that of Naval Brigades acting on shore.

and duties. It is, however, customary for the officers to conduct divine service regimentally on Sunday when no chaplain is available.

It is an impressive sight to see a large body of troops brought together for public worship on Sunday mornings, and strangers are always struck with the heartiness of parade services, and with the reverential and attentive demeanour of congregations composed of soldiers. There is no doubt that these services constitute an important feature in the training which our young men receive in their progress through the army.

But, beyond this, the religious activity, which has been for years past so remarkable a feature in the country at large, has found its way into, and has taken a prominent place in the army. There is no comparison between the work of twenty or five-and-twenty years ago, and that required of, and done by the chaplains at the present moment. The well-known Guards' chapel at the Wellington barracks in London, the restoration of the ancient military churches at Portsmouth and in Dover Castle, the garrison churches at Woolwich and Aldershot (built when Mr. Sidney Herbert was War Minister), and there are others, evidence the sympathy of the administration with this activity in recent years. And the work is still being continued at Aldershot and elsewhere. At all these places, and in all military quarters, work is being engaged in by the chaplains, including the guidance or direction of the numerous societies and guilds formed in connection with church management, in such a healthy spirit that the army may claim at each large station to have an organization which compares favourably with that of any important town parish or religious community.

The State, therefore, not only officially recognizes but gives her solid and effective help to the observance of religion in the army.

2. *Organization. Terms of Service, Duties.*

Chaplains were first appointed by Charles II. to every regiment (1661-62). They were fully commissioned, and under the direct orders of the officer

commanding.¹ Abuses arising, chiefly from the sale of commissions, a Royal Commission was appointed in 1796 to inquire into them; and to this commission we owe the creation of the office of a chaplain-general. From December 29th, 1796, no chaplain has been allowed to sell, exchange, or transfer his commission.

In 1809, chiefly owing to the representations of H.R.H. the Duke of York, then Commander-in-Chief, a second Royal Commission was assembled, of which the present chaplains' department is the outcome.

Prior to 1858 the department consisted exclusively of clergy of the Church of England; in that year, General Peel, Secretary of State for War, increased its establishment, and appointed fifteen Roman Catholic and five Presbyterian chaplains.

Finally, in 1868, the Crown defined a military precinct, declaring it to be an extra-parochial district for all ecclesiastical purposes.²

Establishment.—The existing establishment consists of 83 commissioned chaplains, of whom

63 are Church of England.

15 „ Roman Catholic.

5 „ Presbyterian.

They are divided into four classes, respectively ranking with colonels, lieut.-colonels, majors, and captains. The extreme limit of age, on entering, is 35 years, the lowest limit is 27 years.

Besides the cost of the chaplains' department, a sum is allotted each year in the estimates to defray the charge for the officiating clergy who minister to the troops at minor stations.

For the Church of England, the Chaplain-General is the head of the department at the War Office. He supervises, in every detail, the spiritual work amongst the troops. The senior officer of the department at each station arranges the work of his juniors in the station, reporting, if necessary, to the Adjutant-General, Horse Guards, through the general officer commanding. On purely ecclesiastical matters the communication is direct with the chaplain-general.³

The Roman Catholic and Presbyterian chaplains arrange their own duties under the general officer commanding the district, and are under his immediate control. Their administrative head is the permanent Under-Secretary of State for War.

Every chaplain on appointment serves one year on probation; if favourably reported on his commission antedates in the usual way. After ten years' service in the 4th class, he is entitled to promotion into the 3rd class. He serves five years in the 3rd, and five in the 2nd class, after which,

¹ In the 18th Article of War, 1662, we read "the chaplains to the troops of guards and others in regiments shall every day read the Common Prayer of the Church of England to the soldiers under their charge . . . and shall preach as often as shall be thought fit."

² Clode, vol. ii., chap. xxviii., p. 387. The chapter contains a full history of the chaplains' department.

³ Regulations for Chaplains' Department, vii., 813.

i.e., after 20 years' service, he receives promotion into the 1st class, in which he may remain until he is 60 years of age.

Chaplains take their turn of home and foreign service, and are moved from station to station at home. Five years is an unusually long period for one home station, except in the case of seniors appointed from time to time to the various large garrisons.

The tour of foreign service involves some five or six years abroad, according to climate, in colonial garrisons. India is served by chaplains to the Indian Government. There are two rosters, the senior and the junior, and one foreign tour in each is about the present average to each chaplain.

Duties.—In addition to the usual Sunday morning parade services, the chaplain holds other weekly, and occasionally daily, services in the garrison church; he visits the sick in hospital, the married quarters, schools, &c., and in fact interests himself in everything which can benefit the soldier from a moral and spiritual point of view. As regards parade services of the Church of England, the chaplain is guided as to their nature and duration by the instructions of the chaplain-general.¹ The hours of service and the attendance and seating of the soldiers are arranged in concert with the officer commanding the station.

3. *Agencies in the various Garrisons.*

Amongst the various agencies at work for the welfare of the soldier may be briefly mentioned, as the more important, the following:—

At a very large number of stations, scripture readers are appointed who work in concert with the chaplains of the denomination to which they belong. There are for the Church of England, 76 readers at home, in the colonies, and India; they are appointed and paid by the Army Scripture Readers' Society, which has for its president General Lord Wolseley. These scripture readers are selected men, who generally have served in the army or navy.

"Church rooms" in connection with the Church of England have been erected by private effort in London, at Winchester, and elsewhere, and have been found very useful. They provide increased facilities for the chaplains and the men and others under their charge, to meet together.

Other agencies are supported by private enterprise; such are the "soldiers' homes," identified specially with the names of Miss Daniell, at Aldershot, and of Miss Robinson, at Ports-

¹ Issued with Army Orders 239 of 1890.

mouth, names well known throughout the service, as suggesting unwearying interest for the soldier's good. There is also amongst others, an excellent "home" in Hill Street, Woolwich, presided over by the Misses Shubrick. Other "homes" exist in many garrison towns, notably those under the skilful management of the Wesleyan body, at Chatham, Woolwich, and elsewhere.¹

Private enterprise has further done an important and much appreciated work for the moral welfare of our men by the erection of "soldiers' institutes," some of which are worked independently, and some under the auspices of a parent society, as is the case with those called the "Church of England institutes," which have been founded at Aldershot, Colchester, and elsewhere. These establishments, which resemble clubs, go far towards counteracting the influence of the public-house, and of the society in the streets of large garrison towns. They are also intended to meet a long-felt requirement in providing within their walls sleeping accommodation for any soldiers or their wives, who, when passing through from one station to another, experience so constantly great difficulty in obtaining a satisfactory night's lodging.

Allusion has been made to the desire shared by the army itself, by its administration, and by those who direct private enterprise in the provision of homes and institutes, to counteract what is spoken of as the influence of the public-house. But, in truth, not much can be done if the army has not the active support of public opinion, manifested through the action of borough and local authorities.

The fact is that at present our soldiers, and especially those at home stations, who, as has been shown, are the youngest in the army, have passed but a few years, perhaps months, in its ranks. They are a fair sample of the population in general, well brought-up lads, many of them fresh from

¹ The "Army Temperance Association" in India is officially recognized. It is strictly undenominational.

country life and the careful moral teaching which our parochial system affords. In short, they come up good, and their own desire, and that of the officers, and of the administration is that they should remain so, and not learn vice through their service in the army.

With the navy, the men of which form a large element in many garrison towns, it is the same thing. Nearly all the bluejackets come from the training ships, where they have been under strict supervision and have had the benefit of a careful moral and religious training. But the aspect of some garrison towns with their superfluity of public-houses, places of low-class entertainment, and other temptations, would seem but little in consonance with the above description of the real character of the garrisons. This is because these houses and their management are an inheritance and a survival from a bye-gone state of things, from a time when our soldiers and sailors were a peculiar class and "Jack ashore" was a proverb.

It may perhaps not be presumptuous to appeal to our fellow citizens to bring persevering efforts to bear in reducing the number of such houses, and improving the style of their management; to direct their magisterial power so as to lessen the probability of their soldiers and sailors learning vice by residence in the towns where they are called on to live. In former days in the service men were taught to drink spirits, and many a lad took his first glass of stiff grog in the form of a Government ration on board ship and on service. The military administration has long since given up this practice; but through outside influences other things are still taught, and will be unless the effective co-operation of those in civil authority be given to remove the reproach which has so long hung about the word "garrison town."

The army chaplains' department has, it is believed, justified its existence, and the soldier, so well looked after in the present day, with regard to all his material and intellectual wants, is not by any means left out in the cold

with regard to his religion. He has a chaplain ready to hand wherever he may be stationed. In fact the soldier sees probably much more of his parson than his companion or friend in civil life. What remains but for the soldier to value these privileges, and for the chaplain and all who support him, or can help him, to realize their responsibility ?

JUDGE ADVOCATE GENERAL'S DEPARTMENT.

1. *Constitution and general functions.*—The Judge Advocate General, who is at the head of this department, superintends the administration of military law in the imperial army at home and in the colonies as distinguished from India. He advises the Crown in all questions of military law submitted to him, either by the Secretary of State for War, or by any of the military authorities. He is also by direction of the Army Act charged with the custody of the confirmed proceedings of all general and district courts martial. Previous to their being filed, he reviews, either by himself or by his deputies, these proceedings, and, in case of any illegality vitiating the conviction, brings it to the notice of the authorities with a view to such conviction being set aside.

In the case of all general courts-martial held in the United Kingdom, he appoints a deputy to attend the court, and to watch the proceedings as legal assessor to the court, and, in the event of a conviction resulting, after a careful review of the proceedings, attends the Sovereign in person and reports whether the trial has been conducted according to law, and whether such conviction may be upheld.

For any important or complicated case brought to trial before a district court-martial, when the convening officer wishes the court to have legal assistance the judge advocate general appoints a deputy to attend.

General officers commanding abroad have power under their warrants to appoint a suitable officer to act as Judge Advocate at any general or district court-martial within their command.

It will be seen, therefore, that the most scrupulous care is taken to ensure that the higher military courts are conducted in accordance with the principles of justice, and in conformity with the rules of evidence. Charges are first carefully sifted and inquired into both by the soldiers' commanding officer, and by the general commanding previous to trial; and the whole proceedings are again carefully considered by the general before confirmation, and are finally reviewed by the judge advocate general. Hence the soldier has virtually the protection of a court of law against possible illegality or injustice, and it may be said generally that it is his sole protection in that sense, inasmuch as the superior courts have invariably declined to interfere with military trials so long as the court is deemed to have had jurisdiction.

Although the Judge Advocate General acts as a final court of appeal in military trials, and is independent of the Secretary of State for War and of the military authorities, he is invested with no inherent appellate jurisdiction. He has no original power of "quashing" any conviction. His function is simply that of an adviser. He advises either when consulted, or, *ex proprio motu*, that a conviction cannot legally stand. But in practice his advice is invariably acted on by the military authorities.

2. *The Judge Advocate General's Department at Home* consists of the Judge Advocate General, who, until quite recently, has been a political officer changing with the government; the Deputy Judge Advocate General, a barrister who is a permanent official; and a Deputy Judge Advocate who is a military staff officer, and who not only has experience of military law, but supplies the knowledge of military regulation and usage.

3. *The Judge Advocate General's Department in India; and in time of War.*—By the terms of the Judge Advocate General's patent it would appear that he is not responsible for the department in *India*, although for the sake of convenience the proceedings of general and district courts-martial held in

India on officers or soldiers of the imperial army are stored for the prescribed periods in his office.

It should be noted that the Judge Advocate General's branch in India is composed entirely of military officers appointed by the Indian Government.

INDIAN BRANCH.

1 Judge Advocate General .. ..	..	} Army head-
1 Assistant Judge Advocate General ..	..
4 Assistant Judge Advocate Generals ..	..	Bengal.
8 Deputy Judge Advocate Generals, ..	..	Madras.
1 Deputy Judge Advocate General..	..	} Bombay.
1 Assistant Judge Advocate General ..	..

It is necessary to mention in explanation of the comparatively large number of officers of the department in India, that not only have they a large native army to superintend, but that while in the United Kingdom and in the colonies the examination and preparation of charges for courts-martial and the review of the proceedings before confirmation, are performed by staff officers of the Adjutant-General's division, those duties are in India undertaken by the officers of the Judge Advocate General's department.

In the event of a *war* of any importance breaking out, one or more judge advocates would be appointed by the Crown or be deputed by the J. A. G. to accompany the troops. It will be readily understood that the office of judge advocate is even more important in war than in peace, as the chief officer in such capacity accompanying an expedition would be the sole adviser of the commander-in-chief in all questions of military law, and also, if the necessity arose for its adoption, in the administration of martial law, either in an enemy's country, or in any part of the British empire where a state of rebellion might exist.

4. *Return of General and District Courts-Martial in the Army, from 1880.*—The following is a return of the general and district courts-martial held at home and abroad from 1880 to 1891, distinguishing those held in India from those held at home and in the colonies. With a gradual increase in the strength of the army there has been a decided decrease in the number of trials during the period under review. As the strength of the British army in India may be roughly taken as one-third of the whole it is evident that the proportion of courts-martial held in India speaks favourably for its discipline and behaviour.

Year.	General Courts-Martial.		District Courts-Martial.		Grand total. General and District Courts-Martial at home and abroad.
	Home and Colonies.	India.	Home and Colonies.	India.	
1880	66	78	7,185	1,591	8,920
1881	80	121	7,429	1,603	9,233
1882	176	79	6,373	1,374	8,002
1883	116	56	5,946	1,293	7,411
1884	26	38	6,120	1,388	7,517
1885	44	37	7,684	1,582	9,347
1886	35	48	7,547	1,974	9,604
1887	22	28	5,593	1,813	7,456
1888	15	13	5,410	1,795	7,233
1889	11	17	4,961	1,541	6,530
1890	10	14	4,902	1,345	6,271
1891	15	14	5,126	1,424	6,579

5. *The Military Law governing the Army.*—The imperial army at home and abroad is governed by the Army Act, 1881, which since 1879 has replaced the annually passed Mutiny Acts and Articles of War. The text of the act and the procedure for administering it, together with the Militia and Reserve Forces Acts may be found in the official Manual of Military Law.

It would be out of place in a work of this description to go into the question of military law, but it may be shortly said that the powers of a general court-martial and of a district court-martial are much the same, except that the latter cannot try an officer nor award sentences of death or penal servitude.

The average sentence of imprisonment awarded by district courts-martial is from two to three months, and it is not until a soldier has been guilty of repeated breaches of military discipline, or of some really grave offence, that he is more seriously punished by a district court-martial, or sent to take his trial before a general court-martial.

6. *Historical Retrospect.*—The office of judge advocate general is a very ancient and honourable one, dating from the

days of the men at arms of the Emperor Maximilian and Gustavus Adolphus, when the military tribunals were presided over by legal assessors called "auditeurs," a title and office that is still kept up in the German army. We find that there was in England an "Advocate General or Judge Martial" prior to the passing of the first mutiny act, for, in the "book of English military discipline" of James II., dated 1686, the judge advocate is directed to sit at the bottom of the court-martial table; and in the articles of war of James II., 1688, Art. LI. enacts "In all criminal cases which concern the crown, His Majesties Advocate General or Judge Advocate of the Army shall inform the court and prosecute in His Majesty's behalf." In the first mutiny act dated 1689, the judge advocate or his deputy is to administer the oath to the members of a court-martial. The direction that the judge advocate was to prosecute in the king's name was repeated through subsequent articles of war and continued in force until the celebrated Crawley court-martial case in 1868, when the anomaly of the same person taking an active part in the prosecution on behalf of the crown, whilst he acted as legal adviser to the court and represented the final court of appeal of the judge advocate general led to so much difficulty, and caused such a public outcry, that the practice was abolished, and the representative of the judge advocate general before courts martial now acts solely as an adviser to the court and impartial assessor between the crown and the prisoner.

ARMY PAY DEPARTMENT.

1. *Organization and Duties.*

The Army Pay Department is administered under the orders of the Financial Secretary.¹ It was established from 1st April, 1878, by Royal Warrant of 22nd October, 1877.

Previous to that date the account duties, now devolving upon the department, had been allotted to four different classes

¹ It is in contemplation to bring the administration of the Army Pay Department under the Military Department of the War Office.

of officers, having no common organization as accountants, viz. :—

- (1). Regimental paymasters, gazetted to a regiment or corps, and not removable therefrom except for misconduct, or by exchange.
- (2). Control paymasters (pay sub-department of the late control department), dealing mainly with the pay duties for staff and supply services.
- (3). Staff officers of pensioners, paying the army reserve and army and navy pensioners.
- (4). Adjutants of auxiliary forces, making the public disbursements for the militia and volunteers.

By the formation of the army pay department, paymasters, as members of a general service, have become liable to move from station to station as the exigencies of the service require. Entrance into the department has been restricted to officers holding combatant commissions, and these officers, by having in all cases to undergo a period of probation, are not placed in charge of cash duties immediately on appointment.

The *duties* of the Army Pay Department are to receive, disburse, and account for moneys receivable and payable for military services, and, when required, to act as agents for the Lords Commissioners of the Treasury in the raising and movement of funds, and in the receipt and disbursement of moneys.

The *ranks* assigned to the officers appointed to the department at its formation were staff paymaster and paymaster. Staff paymasters were placed in charge of the pay duties of the military districts—the work done by the old control paymasters—and of regimental district pay offices, while officers of the rank of paymaster were generally attached to corps.

The rank of chief paymaster was added from 1st April, 1881, and appointments of this grade were made to the chief military districts.

Paymasters continued to be attached to regiments and battalions until 1889, when the station system of payment was introduced.

2. *Station System in Peace and on Active Service.*

Under the station system of payment regimental paymasters have been abolished. At every regimental dépôt and every important military station there is now an officer of the army pay department, styled the “station” paymaster, who

is charged with the payment of all the corps at the station or within the area assigned to the station. He receives from the War Office such funds as are necessary for the payment of the troops, and issues weekly, to the adjutant of each regiment or battalion of cavalry or infantry, or to the officer commanding a unit of other corps, the amounts required for the payment of such corps. He also continues to make such payments as were previously made directly by the regimental paymaster, such as deferred pay, lodging money, &c.

The duties of the captain of the troop or company remain precisely the same as before the establishment of the station system, except that he receives the money required for his company from the adjutant instead of from the regimental paymaster. At the end of each month the troop or company pay lists are sent in to the station pay office, and the paymaster, after subjecting them to a preliminary examination, transmits them to the War Office, together with a general state or recapitulation of totals. The general state also contains an account of all the direct disbursements made by the paymaster. This monthly general state with its subsidiary pay lists takes the place of the half-yearly consolidated account which the regimental paymaster had formerly to compile from the company pay lists for the preceding six months.

At those stations which are the headquarters of regimental districts, the paymaster undertakes further all charges connected with militia, volunteers, army reserve, pensioners, and recruiting, belonging to the regimental district which are not assigned to the paymaster of the military district.

At a station which is the headquarters of a military district, the paymaster, in addition to the ordinary duties of a station pay office, is charged with the duties of payment of and accounting for all staff and district services in the command. This is also the case at all foreign stations where a paymaster is located.

Every paymaster in charge of a pay office is therefore a "Station" Paymaster, though the nature and extent of the duties vary at different stations.

Station pay offices may be divided into four classes, according to the nature of the duties :—

- (1) Station pay office—*e.g.*, Fermoy, Shorncliffe.
- (2) Station and regimental dépôt pay office—*e.g.*, Chichester, Norwich.
- (3) Station and district pay office—*e.g.*, Portsmouth, Malta.
- (4) Station, regimental dépôt, and district pay office—*e.g.*, York, Belfast.

At the more important stations, where the financial work is considerable, the station paymaster has the assistance of one or more junior officers of the Department.

The routine work of the pay offices is performed by a staff of clerks, the majority of whom belong either to the corps of military staff clerks, or are regimental paymaster-sergeants, who are an expiring class, and a relic of the old regimental system of payment. An army pay corps of clerks has now been formed, from which the whole staff will, in future, be provided. In some offices civilians are also employed.

Active Service.—The system of payment by paymasters in charge of stations, who are responsible for the supply of funds to, and the rendering the accounts of all the troops quartered within the station area, has in recent years been always resorted to in time of war, when paymasters have been taken away from their regiments and battalions, and have been located at such centres as the officer in command deemed most desirable for financial purposes.

The number and position of all military chests and pay offices required in the theatre of war will be decided by the military authorities. If considered advisable by the Secretary of State, an officer of the finance branch of the War Office will be specially appointed to direct the finance duties of the army in the field, and to act as financial adviser to the general commanding. He will superintend the duties of the treasury chest, and will conduct, so far as is possible locally, an examination of the accounts of the army. His office will be at the base of operations or at such other station as the general commanding may think most convenient.

3. *System of Payments, Supply of Funds, and Inspection.*

All payments on account of army services are made in accordance with the rules laid down in the financial instructions issued for the guidance of paymasters.

The paymaster gives every assistance in supplying cash in

lieu of cheques, whenever this course is the more convenient for the regimental officers who pay the men: it is very important that the onerous financial duties of the officers should not occupy more time than is absolutely necessary, nor hinder their performance of their more professional duties.

Payments for Staff and District Services.—Claims on account of supply, transport, ordnance store, and Royal Engineer services, are forwarded to the paymaster at the headquarters of the military district for examination and payment. That officer also pays all contractors' bills, all bills for purchases, hire of labour, transport, &c., and claims for rents, rates, and taxes. At home stations claims amounting to £100 and upwards, and claims under £100, if on account of a purchase of £100 and upwards, are forwarded to the War Office for examination and payment. All claims have to be certified by the head of the department concerned, and the paymaster is furnished by the general officer commanding with a list of those officers who are authorised to certify claims for payment, or to certify to the receipt of animals, supplies, or stores.

In order to ensure the requisite check upon claims sent to a pay office for payment, the officer who passes the claims has to transmit a list of them, under a separate cover, to the paymaster.

Army Agents.—It will be noticed from the Army List that under each regiment is given the name of a firm of agents. The regulations provide that a regimental officer serving at home or abroad (except India) may receive his pay either from the regimental agent, or from the station paymaster, as he may elect. Most officers elect to draw their pay through the agents, keeping running or banking accounts with them, upon which they draw to suit their convenience. All the pay and allowances of officers and all ranks of the Household Troops, except travelling allowances, are issued and charged by the agents.

The pay of a regimental officer is issuable monthly in

advance, provided he is effective and entitled to pay on the first day of the month for which the advance is made. Commanding officers forward to the agents, on the first day of each month, a return of all officers drawing pay from the agents who are effective on that date. Until the receipt of this return the agents do not issue, except at their own risk, the pay of any regimental officer. The agents obtain the necessary funds from the War Office on an estimate prepared and sent in by the 21st of the preceding month, and render a quarterly account to that department.

The agents also issue the pay and allowances, except travelling allowances, of officers of the general staff and departments at home stations. At foreign stations issues are made by the district paymaster. The pay of staff and departmental officers is issued monthly in arrear. At the end of the month the general officer commanding, and the senior officer of each department in each district at home, send in to the agents returns showing, respectively, all officers of the general staff and departments serving within the district. A quarterly account is rendered by the agents to the War Office.

Army agents are appointed by the Secretary of State. A contract has been concluded for a period of twenty years from 1st January, 1892, under which the three firms of Messrs. Cox and Co., Holt and Co., and Sir Charles R. M'Grigor, Bart., and Co., have been appointed army agents under guarantee, a substantial security being given by each firm. Messrs. Cox and Co. also make the payments of the effects of deceased soldiers.

Supply of Funds.—At home funds are obtained by means of drafts on the Paymaster-General, issued by the War Office and negotiable through bankers. Abroad funds are supplied by the paymaster in charge of the treasury chest, in accordance with the treasury chest regulations.

A paymaster acting as treasury chest officer is charged with the duty of raising, holding, and paying under proper authority the money required for every branch of the public

service abroad. Funds are either obtained locally in exchange for bills drawn by the paymaster and treasury chest officer on the Lords Commissioners of Her Majesty's Treasury, or specie is transmitted from this country.

Inspection.—A system of local inspection at frequent intervals, but not at fixed dates, has been established. The officer in charge of the pay duties at the headquarters of a military district, who is generally a chief paymaster or a senior staff paymaster, is charged with the duty of inspecting annually, under the instructions of the Secretary of State, the accounts of the various station pay offices in the command. The accounts of the district paymaster are as a rule inspected by a member of the finance branch of the War Office.

4. *Illustrations.*

The working of the system of payment and the method of supplying funds for regimental services may be briefly illustrated by reference to the practice in the infantry.

On a battalion arriving at a new station, the adjutant at once places himself in communication with the station paymaster in order to obtain the necessary funds for the payment of the men. In the case of a detached company, squadron, or other unit, the officer commanding communicates directly with the station paymaster, who will supply him with the necessary funds.

The ordinary method of procedure is as follows :—

In the infantry the company officer forwards to the adjutant weekly requisitions for the cash required for the payment of his men. The adjutant compiles and forwards to the station paymaster a weekly requisition for the cash required for the whole battalion, showing each company separately. At home stations the paymaster compiles about the middle of each month a cash estimate which he sends in to the War Office, and that department issues to him weekly drafts on the paymaster-general in accordance with his estimate. Each draft when received by the paymaster is paid in by him to the public banking account which is opened by the paymaster, usually with some local bank. At foreign stations funds are drawn from the treasury chest, of which the paymaster is the custodian.

The paymaster issues to the adjutant, generally by cheque, or in cash should this method prove more convenient, the money required for the pay-

ment of the battalion. This money is distributed by the adjutant among the various company officers, who use it to pay the men. The men are paid weekly in arrear in the presence of an officer. In making cash payments to the men the company officer takes care to issue only so much as the soldier will be entitled to receive clear during the month, after taking into account all the stoppages which will appear against him. A daily record of messing, and of cash paid to, or on account of the soldier is kept in the pay and mess sheet (Army Form N. 1504).

A ledger account is kept in duplicate for each man on Army Form N. 1505. These forms are known as the company "pay list" and "duplicate pay list," and are completed at the end of each month, when the men are settled with by the officer commanding. Each soldier signs his account in the "duplicate pay list," and the two forms are sent to the adjutant for transmission to the station paymaster not later than the 4th of the following month. The paymaster examines the pay lists, and, after making any necessary disallowances, returns the "duplicate" to the officer commanding, and transmits the "pay list" to the War Office as a voucher to his general state, into which the total receipts and disbursements shown by the company pay list are carried.

The paymaster keeps a separate ledger account with every company officer, and it is his duty to see that all advances, or imprests of cash are duly accounted for, and that the balances in the hands of his sub-accountants are kept as small as possible. Sub-accountants in applying for advances have to make allowance for the balance of cash in their hands.

Regimental payments which do not pass through the company pay list, such as command pay, extra duty pay, mess, lodging and fuel and light allowances of officers, and deferred pay of men, are made direct by the station paymaster and charged in his general state. In the case of a battalion the adjutant prepares monthly a voucher for the regimental allowances, and collects the receipts of the officers concerned. The paymaster forwards to the adjutant a separate cheque for the amount due to each officer.

The pay of the Household regiments is issued by the army agents; the quartermaster renders the accounts to the agents.

The system for the cavalry is much the same as for the infantry.

The commanding officer of a battery, or of a company, Royal Artillery, Royal Engineers, or Army Service Corps, keeps his account, and obtains the necessary moneys from the paymaster direct.

The pay or wages of the subordinates of the various departments are as a rule issued by the officers under whom they are immediately serving. These officers receive imprests from the district paymaster, just as a company officer does for the payment of his men, and account for their receipts and expenditure in a monthly pay list.

ARMY VETERINARY DEPARTMENT.

1. *Origin and Development.*

Previous to the establishment of the Royal Veterinary College in London in 1792, there were no veterinary surgeons

in the army, the horses being attended to, when suffering from disease or accident, by the regimental farriers, and sometimes the surgeons were called upon to render aid. Early in this century, consequently upon the heavy losses occurring among army horses, veterinary surgeons were appointed to cavalry regiments, to the Royal Artillery, and to the Royal Wagon Train. They entered with the relative rank of lieutenant. Each cavalry regiment had a veterinary surgeon, but the Royal Artillery had only two or three up to the time of the Crimean war, after which the number allowed for that corps was considerably increased, while each battalion of the newly-formed Military Train was allowed one. With the abolition of the East India Company after the Mutiny, the number was still further augmented ; owing to more imperial troops being sent to that country, and the local veterinary service being no longer maintained.

In 1878 the regimental system was abolished—except in the household cavalry regiments—and the veterinary department constituted. All the veterinary officers were then put upon a general roster for foreign service, save those in the household cavalry.

2. Present Organization and Duties.

A few minor changes have taken place since 1878, and at the present time the constitution of the veterinary department is as follows :—

A director-general, with the rank of veterinary-colonel.

Eight administrative veterinary officers with the rank of veterinary-lieutenant-colonel.

One hundred and nineteen executive veterinary officers with the rank of veterinary-major, veterinary-captain, and veterinary-lieutenant.¹

The director-general is the administrative head of the department. He is an officer of the headquarters staff of the army, transacting his business at the War Office.

At home the administrative veterinary officers called district veterinary officers, four in number, are stationed at London, Aldershot, Woolwich, and Dublin (for Ireland).

¹ For rules as to first appointments to the Army Veterinary Department, see chap. xviii.

The district veterinary officer has the general administrative veterinary supervision of the district or army corps to which he is attached, and is an officer of the district headquarters staff, available at the call of the general commanding, for reference or advice on all points connected with his department. Under the instructions of the director-general, and subject to the orders of the general officer commanding, he personally superintends all the veterinary duties of his division or district. His duties include frequent inspection of the horses or other animals employed, stables, camps, forage, and all departmental details in his charge. The results of these inspections are systematically embodied in a report forwarded to the director-general.

The executive veterinary officers perform their duties under the control and direction of the director-general and district veterinary officers of their districts or divisions. A veterinary officer is attached to each regiment of cavalry, and also performs veterinary duties for other units at the station where he may be. Veterinary officers are posted to stations occupied by other mounted corps.

Executive veterinary officers have the control of the infirmary stables or sick lines, pharmacies, and forges ; and of the non-commissioned officers and men employed therein. In addition to the care and treatment of the sick and lame horses or other animals, one of their most important duties is the prevention of disease, by the avoidance or removal of predisposing causes and the adoption of the most approved sanitary measures in the barrack stables or camp lines. With these objects in view, veterinary officers are required to give very particular attention to the quality of the forage supplied, and to the general ventilation of the stables, and their advice and suggestion on these matters always receive full attention from commanding officers.

With regard to shoeing, this service is carried on regimentally as to supply of shoes, nails, and tools, the management of the horses' feet, and the periodical renewal of shoes ; but the manner in which the shoeing is conducted, and the proper instruction of farriers and shoeing smiths, are matters for which the veterinary officer is directly responsible—the patterns of shoes being arranged by the director-general of the department, so as to ensure uniformity throughout the army.

Thus it will be seen that, though a departmental officer, the veterinary officer has to conduct his duties with a very intimate knowledge of the working of the regimental system,

in order to ensure a successful result, and in their turn regimental officers look to and support him as a valued assistant and adviser.

This consideration leads to a remark on an innovation of recent introduction affecting the official position of veterinary officers, and which endows them with a military, in addition to their professional title. It will have been seen from the foregoing how constantly they are in the position of having to give orders to soldiers. Those familiar with the customs of the service well know how much an officer's duties in this respect are facilitated when he is recognized by the troops under a military title, which gives weight and force to his orders and suggestions, and commands respect and attention. This new regulation, therefore has proved most beneficial to the mounted corps of the army.

The System in India.—In India, one of the four administrative officers stationed in that country is selected as local chief, with the designation of principal veterinary officer to the forces. He is stationed at Simla. An administrative inspecting veterinary officer is posted to each presidency. The duties of these officers are analogous to those of the administrative officers at home.

Executive veterinary officers are not attached to regiments as at home, but are posted to station veterinary hospitals. From these stations they visit out-lying charges periodically, or at other times when their services are required.

Duties on Active Service.—In the field, the principal veterinary officer will be attached to the staff of the general of communications,¹ and will direct and be responsible for all veterinary arrangements connected with the army.

Administrative veterinary officers will also be attached one to each infantry division, one to the cavalry division, one to the line of communications, one to the base, one to the sick horse hospital, and one to the remount dépôt. These officers will arrange and regulate the duties of the executive veterinary officers, under the general direction of the principal veterinary officer.

Executive veterinary officers will be posted for duty generally, in accordance with the requirements of the army. Each officer will have on charge a pair of field panniers fitted with a complete assortment of medicines and instruments and surgical stores.

¹ See "Regulations for Supply of an Army in the field, &c."

The administrative veterinary officer at the base will be in charge of the reserve stores of veterinary medicines and appliances, and will be entrusted with the duty of forwarding supplies to the front on requisition as required. Expense stores will also be kept at the principal depôts along the line of communications.

A veterinary officer will be appointed to act as sanitary officer, and will superintend the embarkation and disembarkation of all animals, as well as carefully inspect them, in order to ascertain their general condition and freedom from contagious diseases.

The veterinary department in the field will furnish reports and returns as to the health, sickness, casualties, and sanitary condition of the animals employed; will see to the supply of horse-shoes and nails, as well as field forges; keep a vigilant watch over the quality of the forage, and do everything possible to maintain the efficiency of the horses and other animals in use.

CHAPTER XVIII.

SUPPLY OF OFFICERS TO THE ARMY.

IN this chapter the various channels through which commissions in the army are obtained by candidates, and appointments to certain branches thereof are conferred on officers, will be indicated. Regulations on this subject are necessarily modified from time to time; the latest can always be obtained by application to the proper quarter, that is, for the Royal Artillery, Royal Engineers, Cavalry and Infantry, to the Military Secretary, Horse Guards, War Office; for the Royal Marines, to the Secretary to the Admiralty; for the several departments, to the Under Secretary of State for War; and for the Indian Staff Corps, to the Under Secretary of State for India.

1. *Royal Artillery.*

Commissions in the Royal Artillery may be obtained as follows:—

(a) *Through the Royal Military Academy,¹ Woolwich.* The candidate must be British born or a naturalised British subject. The examinations, which are held twice a year, are competitive, the number of vacancies varying according to demand; limits of age 16 to 18. Candidates are required to pass (i) a “preliminary,” and (ii) a “further” examination.

Preliminary examinations,² which are not competitive, are held in the months of March, June, September, and December of each year by the Civil Service Commissioners, to whom intending candidates should apply. A candidate should be 14 years of age or over, and may have any number of trials.

Successful candidates in the further examination join the Royal Military Academy on certain terms of annual payment. The sons of naval and military officers pay smaller contributions than those of civilians and in proportion to rank. Queen’s cadets pay no contributions.

¹ The various educational establishments are further alluded to in chap. xxv.

² The system of holding “preliminary” examinations will, it is understood, be abandoned.

For the ten years, 1882–1891, the average number of competitors for each year was 411, and the average number of vacancies 123, or 3·3 candidates for each vacancy.

(b) *Through the Militia.* For conditions see regulations.

(c) When, owing to an unusual number of vacancies, officers are urgently required, the plan of giving a certain number of direct commissions to candidates who are successful at a special examination for the purpose has been resorted to with good results.

(d) *From the Colonies.* One commission is offered annually to cadets from the Royal Military College, Kingston, Canada.

(e) *From the ranks.*—Commissions are given as quartermasters and riding-masters, and as lieutenant in the district staff. The possession of a first-class certificate of education is a necessary qualification. On appointment each receives £100 for outfit.

2. Royal Engineers.

Commissions in the Royal Engineers may be obtained as follows :—

(a) Through the Royal Military Academy, under the same regulations as given above for the Royal Artillery. After the bifurcation at the Royal Military Academy at the end of the first year's course, those cadets who have elected for engineers (the number being limited according to the vacancies available) receive a special further training of a year, and then on passing the final examination are commissioned in the Royal Engineers and join at the School of Military Engineering, Chatham, where they undergo further training for about two years.

(b) One commission is offered annually to cadets from the Royal Military College, Kingston, Canada.

(c) In certain cases when officers have been required for the corps, special examinations were held and commissions given direct to successful candidates. Also at such times some commissions were given to students from the Cooper's Hill Indian Civil Service Engineering College, on the nomination of the Secretary of State for India, and to students from the Chartered Universities of Colonies, on the nomination of the Colonial Governments.

(d) *From the ranks* :—to warrant officers and non-commissioned officers under 40 years of age, as lieutenant in the coast battalion, quartermaster and riding-master. On appointment each receives £100 for outfit.

3. Cavalry and Infantry.

Commissions in cavalry and infantry may be obtained in the following manner :—

(a) *Through the Royal Military College, Sandhurst.* The conditions are practically the same as those for admission to the Royal Military Academy, Woolwich, with the exception that the limits of age are from 17 to 19 for the "further" examinations, and for West India regiments candidates will be admitted up to the age of 23, till July, 1893; 22, till July, 1894; and 21, after July, 1894; also for the "further" examination a lower

standard is accepted. Queen's cadets,¹ honorary Queen's cadets, Indian cadets, and Pages of Honour, after passing the preliminary examination have only a qualifying entrance examination to pass, and are then admitted to the Royal Military College. Queen's cadets and Indian cadets enjoy special pecuniary advantages while there. The course of instruction lasts 18 months, divided into three terms, and consists entirely of military subjects. Candidates have to state beforehand whether they desire to serve in the cavalry or the infantry; the competition for the latter is the more severe.

On passing the final examination the cadets are commissioned as vacancies occur.

For the first three years of their service, officers are reported upon annually by the three senior officers of the corps, who give an opinion as to whether their retention in the service is desirable and likely to be advantageous.²

For the ten years, 1882-91, the number of candidates for admission to the Royal Military College has averaged 885 a year, while the number of vacancies has averaged 244 a year, or 3·6 candidates for every vacancy.

(b) *Through the Militia.*—For conditions see regulations.³

(c) *Through the Universities.*²—The limits of age are 17 to 22 for students who have passed the specified examinations, and 17 to 23 for graduates.

Every successful university candidate must, unless he already holds a commission in the militia or volunteer force, be attached as a supernumerary officer to one or other of these services to learn his drill and obtain the necessary certificate, and qualify in military subjects at the biennial militia "competitive" examinations.

(d) *Through the Colonial Military Forces and from Colonial Universities.*—Under certain conditions commissions in the cavalry and infantry of the line are granted to officers (*bond fide* colonists) of the local military forces of certain colonies, viz.:—

New South Wales,	Queensland,
South Australia,	New Zealand,

¹ *Queen's cadets* are appointed by the Secretary of State for War on the recommendation of the Commander-in-Chief, or First Lord of the Admiralty, from sons of officers of the army, navy, marines, and permanent colonial military forces or irregular troops when acting with, or in support of, the regular forces in the field, who have fallen in action, or have died of wounds received in action, or of disease contracted abroad, and who have left their families in reduced circumstances. Queen's cadets are granted an educational allowance of £40 a year, tenable between the ages of 13 and 17. Applications should be made to the Military Secretary, War Office.

Honorary Queen's cadets are appointed from the sons of officers of the British army, Indian army, royal navy or marines, killed in action or who have died of wounds or disease contracted on service before an enemy. Also from sons of officers of the British and Indian armies who have attained the rank of major or lieutenant-colonel, and have performed long and distinguished service. Honorary Queen's cadets enjoy the same privileges as Queen's cadets, but receive no pecuniary advantage.

Indian cadets are nominated by the Secretary of State for India in Council from sons of persons who have served in India in the military or civil service of Her Majesty or the East India Company. Applications should be made to the Military Secretary, India Office.

² Q.R., sect. v., para. 34.

³ See regulations issued with A.O.

Victoria,
Canada,

Cape of Good Hope.
Tasmania, and

The Royal Malta Militia.

The regulations also provide for the grant of commissions to candidates from the University of Malta, and from the chartered universities of Colonies not having a Military College. Two commissions are offered annually to students from the Royal Military College, Kingston, Canada.

(c) *From the ranks*—as quartermaster, and riding-master. These receive an outfit allowance of £150 for cavalry and £100 for infantry. Commissions are also given as 2nd lieutenants, the outfit allowances each year being limited in number.

4. *Army Service Corps.*¹

Officers of the Army Service Corps are combatant officers of the army, and, under the terms of the Royal Warrant, first commissions may be given under the same conditions as those governing appointment to the cavalry and infantry, but as a rule appointments are only made from unmarried officers actually serving upon the active list of the army and Royal Marines, and having certain qualifying commissioned service. Officers serving with the Indian staff corps are not eligible.

Officers join (as a rule at Aldershot) on probation for one year. They have to pass a course of instruction lasting from 3 to 6 months, after completing which they are available (if recommended) for duty at home and abroad. Should the exigencies of the service so require, captains and subalterns may be "attached" to the Army Service Corps for a period of five years for duty, in which case they receive the pay and emoluments of officers of like rank on the permanent list of the corps.

5. *Royal Marines.*²

Admission to Royal Marine Artillery and Light Infantry as 2nd lieutenants is offered to the candidates in order of merit at the open competitive examinations for admission to the R. M. Academy at Woolwich, and R. M. College, Sandhurst. Second lieutenants on appointment are required to enter on a course of study at the Royal Naval College, Greenwich, beginning on the 1st October in each year.

6. *Chaplains' Department.*

For the appointment of chaplain to the forces in the Church of England, a candidate must have been three years in priest's orders and his age must not exceed 35 years.

On nomination he will be required to serve for one year as a probationary chaplain at some military station under an army chaplain, who will report on his qualifications.

¹ See Horse Guards, W.O. circular, dated June, 1892.

² Admiralty Circular. See also the end of chaps. viii. and xii.

7. *Army Medical Department.*¹

Candidates for commissions as medical officer must be between 21 and 28 years of age. An open competition is held generally twice a year. Successful candidates are first appointed as surgeons on probation, during which time they undergo a special course of instruction at the Army Medical School, Netley (usually about four months). After passing out of Netley they are commissioned as surgeon-lieutenant, and are attached to the Depot and Training School, Aldershot, for instruction in ambulance and medical staff corps work, before taking up their medical duties.

8. *Army Veterinary Department.*²

Application is to be made to the Director-General, Army Veterinary Department, War Office; limits of age are 21 and 36 years, except in special cases. Candidates must be unmarried. Successful candidates are appointed veterinary officers on probation for six months, after which, if recommended they receive commissions as veterinary-lieutenant.

9. *Army Pay Department.*³

Appointments to this department are conferred upon combatant officers of the regular forces within certain limits of age and service. Application is made through the officer commanding the applicant's regiment, who furnishes a confidential report upon the qualification of the officer to undertake financial duties. A candidate when selected is attached to a pay office for instruction, and from time to time is reported on. At the end of his probation he is examined before a board of officers of the army pay department. If found competent to serve in the department, he continues to serve in it on his combatant commission for 5 years, after which, if he elects to remain in the department, he must resign his combatant commission and be commissioned as a paymaster.

10. *Ordnance Store Department.*⁴

The qualifications are briefly a minimum of five years commissioned service in the army or Royal Marines, preference being given in a certain defined order; officers join on probation for one year.

11. *Indian Staff Corps.*

From the time of the formation of the Indian staff corps, admission thereto was offered exclusively to officers of British regiments, under certain precise regulations as to qualifications. The Army Order of 9th March,

¹ Regulations issued with A.O.

² Regulations issued with A.O.

³ Q.R., sect. v., paras. 78 to 85, and Royal Warrant for Pay, &c., arts. 381 to 385.

⁴ Q.R., sect. v., sub-sect. 6, and Royal Warrant for Pay, &c., arts. 290 to 294.

1891, subsequently amended by that of 1st September, 1892, introduced a scheme for direct appointment, and other considerable changes in the system of admission: the latest regulations on the subject should be always referred to by those interested.

The general effect of the existing regulation is that a certain number of appointments to the Indian staff corps are offered to candidates for admission to the Royal Military College, Sandhurst. Queen's cadets (British and Indian), and honorary Queen's cadets nominated by the Secretary of State for India in Council, have the option of accepting these appointments to the staff corps, and the remaining available vacancies are allotted to successful candidates in order of merit; who, thereafter, complete their course of instruction at the Royal Military College. Militia and university candidates for the army are also eligible, but will not be so after the 1st January, 1895. Officers who entered the army before the 1st September, 1892, remain eligible for the staff corps to "such extent as may be determined," and under regulations very similar to those obtaining before March, 1891; but officers entering the army after the 1st September, 1892, will be admitted only as "from time to time required to supplement the direct supply from Sandhurst." It is, however, expressly provided that "any officer of the British army who may show exceptional qualifications for service in India" may be specially selected for the Indian staff corps. Exchange, also, is permitted between an officer of the British service and one of the staff corps under certain conditions which embrace qualification for staff employ under Indian regulations, and that immediate employment is available.

The successful candidates for direct appointment, after their final examination at Sandhurst, are gazetted second lieutenants on the unattached list of the British Army, are sent to India, serve a year with a British regiment, and are then admitted to the staff corps and appointed to a native regiment. The regulations prescribe the conditions for the officer's subsequent retention or promotion in the service, which depend in part on his passing examinations in the native languages.

12. *General Staff at Home and in the Colonies.*¹

The qualifications for service on the staff of the army at home and in the colonies are: A minimum of service in the regular army or Royal Marines of four years, to have passed the final examination at the Staff College or to hold the rank of lieutenant-colonel, or to be of proved ability on the staff in the field.

For appointment to the *personal staff* of general officers, an officer who has not the staff college certificate is required to have qualified for the rank of captain, and also to have passed a simple examination in French.

13. *General Staff of the Army in India.*²

The conditions for service on the staff in India are briefly —

A minimum of four years' service, to have passed the examination in

¹ Q.R., sect. v., paras. 55 *et seq.*

² Army Regulations, India, vols. i. and ii.

the native languages by the higher standard, to have passed the staff college or the qualifying examination as laid down in the Indian Army regulations, or to be of proved ability in the field.

14. *Militia, Yeomanry, and Volunteers—First Commissions.*¹

The lord lieutenant of a county recommends for the consideration of the Secretary of State for War for submission to the Sovereign the names of candidates not less than 17 years of age for first appointments as subaltern officers. Commanding officers are directed to assist the lord lieutenant, if required to do so, in the selection, and certain qualifications must be fulfilled by the candidate. If within 30 days of the notification of a vacancy a lord lieutenant does not exercise his right of recommendation, it lapses, and the commanding officer would be called on to recommend a candidate.

15. *Reserve of Officers.*

See end of next chapter.

¹ See *Militia, Yeomanry, and Volunteer Regulations*.

CHAPTER XIX.

RECRUITING.

RESERVE OF OFFICERS.

1. *Organization of the Recruiting Department of the Army.*

THE Inspector-General of Recruiting supervises the organization and the administration of the staff connected with recruiting for the regular army and the militia. Also all "extensions of service" with the colours, "re-engagements," "re-enlistments," "discharges," the passing of soldiers to the reserve, "transfers" of soldiers to other corps, all questions as to reckoning forfeiture and restoration of service, the mode of keeping up soldiers' records of service, and the scheme for providing reserve men and discharged soldiers with employment.

Further, his department prepares the submission of applications for pension which are outside of the ordinary routine, and for which special consideration by the commissioners of Chelsea Hospital is necessary. It also deals with the arrangements, in conjunction with other departments, for the roster for foreign service, and for the despatch of drafts to units stationed outside of the British Isles; and, speaking in general terms, it is charged with the administration of Part II.¹ of the Army Act, 1881, and the corresponding provisions of the Militia and Reserve Forces Acts, 1882.

Recruiting Staff.—The staff at headquarters consists of the inspector-general of recruiting, and a deputy-assistant adjutant-general. Other agents are :—(1) an assistant adjutant-general, whose special duties are to supervise the recruiting district of London, and the arrangements for the subsistence

¹ Part II. of Army Act deals with enlistment, and includes discharges and transfer to reserve.

and movements of recruits in transit through London. This officer is assisted by two officers termed "recruiting staff officers," each of whom is responsible to him for the efficient working of the recruiting agencies in the east and west districts of London respectively. The headquarters of the London recruiting district are at St. George's Barracks, behind the National Gallery, Trafalgar Square. (2) Five lieutenant-colonels and four officers of junior rank, all classed as recruiting staff officers, who supervise the recruiting areas of the lower Thames district, Yorkshire, Tyne Valley, Lancashire, Birmingham and vicinity, Liverpool, Glasgow, East Coast of Scotland, and Dublin respectively.¹ Finally, (3)—the most important agency—viz., the officers commanding regimental districts and those commanding the militia and volunteer artillery who have charge of recruiting in their districts, and for this purpose have at their disposal the officers and non-commissioned officers of the permanent staff of the militia, as well as the sergeant-instructors of volunteers, under their respective commands.

Besides these agencies, non-commissioned officers on full pay, or who have served in the army, can be given a "beating order," which enables them to act as recruiters; and, in addition, any man, whether a soldier or civilian, bringing a recruit who is approved and passed into the service, is entitled to a reward varying with the branch of the service for which he is attested, and the circumstances under which he was raised.²

2. *The Recruiting System.*

The recruiting system of the British army, regulars and militia, is based on voluntary enlistment.

The enlistment of recruits is as free and as voluntary as possible. In large towns a house or room is hired, so that men desirous of enlisting can go there and obtain from the recruiters pamphlets and leaflets giving authentic information as to the terms and conditions of service in all the branches of the army, without having to be seen talking with a recruiter in the street or in a public house; besides which these pamphlets and leaflets can be had free on application at any post office. The advantages of the army are also fairly set forth on the illustrated placards which are to be found at most railway stations, as well as posted on the hoardings and walls in the towns. Recruiters are forbidden by statute to enlist men under the influence of drink, nor are they per-

¹ For more detailed information, see Annual Report of Inspector-General of Recruiting.

² See Royal Warrant for Pay and Promotion, art. 585.

mitted to take recruits into public houses to entice them to drink.

Certain corps being more difficult to provide with recruits than either cavalry or infantry of the line, by reason of a special standard of physique, or of technical qualifications, recruiting sergeants and others are instructed to adopt a regular sequence, so long as these special corps stand in need of men, in recommending corps, &c., to intending recruits, viz. :—

(a) The Foot Guards, Royal Artillery, and Royal Engineers;

(b) The territorial regiment of the district.

(c) The regiments for which special exertions are required to obtain recruits.

(d) Any corps for which the regimental district is allowed to recruit, as notified from time to time.

(e) "General Service¹ Cavalry," and "General Service Infantry."

When the regimental district is able to enlist more recruits than are required to keep the regular and the militia battalions of its territorial regiment up to their actual and future requirements, and there is no call for (c), as above, then service in the territorial regiment whose regimental district is nearest to the place of enlistment is recommended.

In cases where a regimental district area is not sufficiently populous, or in which the conditions of trade do not admit of its being possible to raise the number of recruits requisite to keep the territorial regiment up to its establishment, the deficiency is met out of the super-abundance of any neighbouring regimental district or from those areas which are supervised by specially selected recruiting staff officers, who exercise their duties impartially as between the interests of the various regiments.

The standards² for infantry of the line are—age 18 to 25 years; height 5 feet 4 inches and upwards; chest 33 inches and upwards, in proportion to

¹ For "general service," see chap. v., p. 53.

² See Schedule of the age, &c., and special qualifications of recruits. Army Orders, December, 1892.

height; weight 115 lbs. and upwards. These standards are considerably higher than those of any foreign army.

As a matter of experience it is found that the country furnishes on an average about 28,000 recruits a year, who are up to these standards.

In years when more recruits are wanted, some, at any rate, of the conditions have to be relaxed if the required number of recruits is to be obtained. It follows therefore that standards are intended and are used more as guides to recruiters in the selection of men than as strict definitions of the physique of accepted recruits.

3. Checks on Recruiting. Modification of Terms of Service and Discharge.

It may sometimes become advisable to place a check on the numbers enlisting in any one corps, or even in the army generally. This may be done by temporarily raising one or more of the standards, or:—

Men seeking enlistment in the regular forces may be recommended, for such a period as it may be necessary to retain the check on the numbers of enlistments in the army, to pass into the ranks of the militia, so far as the establishments of the militia regiments affected will admit.

There is another alternative to placing a check on recruiting; but it is not always available because it requires the consent of the soldier in each case, and it would not be safe to adopt it in reference to the bulk of the infantry of the line—viz., to authorize, in specified corps, for which recruiting is generally easy, an abnormal number of men to be passed into the reserve prior to the termination of their colour service. This plan has nevertheless been occasionally acted on, and with good results. This is called “conversion of service.”

Modifications of terms of service are worked in concert with the business of recruiting, and comprise:—

- (a) Extension of service.
- (b) Re-engagement.
- (c) Conversion of service.
- (d) Re-transfer from the reserve.
- (e) Re-enlistment.
- (f) Discharges.

It is obvious that the more broadly and even generously, these questions are dealt with, consistently with public duty, the fewer in numbers will be those discontented old soldiers who are so apt to make their supposed grievances the subject of public comment, and thus to a certain extent hinder young men from entering the army.

(a) *Extension of service.*—This means the prolongation of a man's service with the colours instead of passing him to the reserve. No check is

placed on such extensions, the possession of a good character being the only condition.

(b) *Re-engagement*.¹—It is obviously of much importance that the privilege of being permitted to re-engage for a further period of service beyond that of 12 years should only be accorded to soldiers whose character and conduct are such as to make them good examples to others.

There are certain periods during the service of both private soldiers and non-commissioned officers at which they should elect to apply to re-engage, viz. :—

Warrant officers	..	..	..	after 9 years.
Sergeants and corporals	..	..	..	9 „
Private soldiers, drummers, trumpet-				
ers, and buglers	..	..	..	11 „

Without some such regulations the flow of promotion in the non-commissioned ranks would be unsteady and irregular, whilst in the case of the private soldiers the test of character requires time for its efficient application. To allow a soldier whose character for honesty, sobriety, and steadiness is not beyond all suspicion to continue to serve for pension would be most harmful to the credit of the army, as nothing does it greater injury than that pensioners should be brought up before the civil power for dishonesty or for offences consequent on insobriety. It is for this reason, as well as to keep down the “non-effective” vote that these restrictions on “re-engagement” have been instituted.

(c) *Conversion of service*.—By “conversion of service” is meant a reduction in the term of service with the colours for which a man has been attested. The term at the present time for other than boys is—3 or 7 years if serving at home and 4 or 8 years if serving abroad; the balance of the 12 years’ service being passed in the 1st class army reserve.

The conditions under which a soldier is permitted under ordinary circumstances to convert his service are, that he must be in possession of at least one good conduct badge, have five years’ service, that his commanding officer recommends him for this indulgence, that he has assured employment awaiting him, and finally, that it is desirable, either for the public service or for the support of some member of his family whose conditions of existence depend upon his assistance, that he should be permitted to re-enter civil life under favourable conditions.

The reasons for these conditions are :—

(1) The soldier should have a certain amount of service and be thus fitted to resume his place in the ranks in the event of mobilization.

(2) His conduct should have been such that when he takes his place in civil life he will reflect credit on his corps and on the army.

(3) That he should not commence civil life without suitable employment; otherwise he would not only swell the ranks of the unemployed, but would soon drift into a state of destitution and bring discredit on the service.

¹ A soldier is said to “re-engage” when he engages to continue his service beyond the term for which he was originally attested, in order to complete 21 years. He is said to “prolong his service” when he agrees to serve beyond 21 years.

It is obviously impolitic to retain with the colours any good, efficient, steady, and well-trained young soldier who is able to obtain employment in civil life and is willing to assist in the support of a parent for whom the workhouse would possibly be the only resource. Under such circumstances the condition as to five years' service is occasionally waived.

(*d*) *Re-transfer from the reserve*.—This means to permit a soldier, who has been passed to the reserve, to rejoin the colours. For obvious reasons this is not generally permissible; consequently applications for re-transfer to the colours are submitted to army headquarters for special consideration, each on its own merits.¹

(*e*) *Re-enlistment*.²—Soldiers who have served previously (except those discharged for misconduct, or on medical grounds) are allowed to re-enlist up to the age of 28 years.

(*f*) *Discharges*.—There are 21 different classes of discharge from the army. For the details of these the Queen's Regulations must be consulted.

The mass of men are discharged on termination of engagement, some are discharged as invalids, some for misconduct, and some for irregularities in enlistment. These latter cases, so far as they affect youths who have enlisted under age, and without their parents' consent, are treated with special consideration. Also it sometimes happens that a recruit has been approved who turns out not likely to make an efficient soldier. Such a man may be discharged on that ground by the general officer commanding on the recommendation of a medical board.

It may be necessary sometimes to dispense with a soldier's further service without bringing him to trial for any offence, either for his own sake, for the sake of the corps to which he belongs, or for the good of the public service. In such cases the wording is either "owing to their services being no longer required," or "for the good of the public service." The latter form of discharge does not necessarily debar the soldier from obtaining a pension, should his length of service be sufficient to bring his case under the provisions of the royal warrant.

Discharges by purchase are almost invariably allowed, except when the applicant for this indulgence is under orders for foreign or for active service, or when the corps to which he belongs is inconveniently below its establishment. In the case of bandsmen, who have usually received an education in music at the public expense, the discharge is generally deferred for a time, and in the case of schoolmasters, who have also been educated at the cost of the public, the purchase money is raised to £50. The amount of purchase money varies according to the length of service unexpired.

¹ For re-transfer in case of small wars, see chap. vii., p. 116 *note*.

² A soldier is said to have "re-enlisted" when, after discharge, he re-enlists for a fresh term of service.

Soldiers of three months and under may claim their discharge as a right, on payment of £10 within that time. After that period discharge becomes a matter of indulgence, and £18 is the purchase money, up to the completion of 12 years' service, after which it may be granted "free."

After 12 years' service a soldier can obtain a free discharge, carrying with it, in cases of 18 years' service and upwards, a modified pension varying from 8*d.* to 1*s.* a day for private soldiers.

Discharges to pension are all referred to a board of the Commissioners of the Royal Hospital, Chelsea, for their decision. Composed as it is of officials, civil as well as military, of high standing and long experience, every endeavour is made to favour the applicant for a pension, so long as the case is a deserving one, and it is within the board's powers to grant it. Very deserving and special cases not coming within the terms of the royal warrants are referred to the Commander-in-Chief, whose recommendation to the Secretary of State for War is forwarded in due course for the favourable consideration of the Lords Commissioners of the Treasury, who alone have the power to grant any pension not authorized by any existing or previous royal warrant.

4. *Employment in Civil Life on quitting the Colours.*¹

The organization and the supervision of a system by which employment is found for soldiers of good character who have either been transferred to the reserve or who have been discharged to pension forms an important branch of the department administered by the inspector-general.

One of the chief reasons why young men enlist into the army is that they are unable to find employment, either because they have nothing but unskilled labour to offer, or because the labour market is glutted. If therefore it can be shown that the surest mode of obtaining the offer of good employment is to pass through the ranks of the army, it is clear that it will make military service more attractive to

¹ See Advertisements at the end of book.

those who are anxious to work so as to be in a position to marry and settle before the age of thirty. When it is found that only those soldiers who have borne a good character are readily provided with employment, the standard of character in the army will be automatically raised. This will tend to remove the drawback which has for so long a period affected the career of a soldier, and should provide the army with the better class of non-commissioned officer necessitated by the spread of education amongst the classes from which most of the recruits are drawn.

In 1884, after careful consideration by a War Office Committee presided over by the then inspector-general of recruiting, the advisability of finding employment for soldiers of good character on their return to civil life was admitted. In consequence of the recommendation of this committee fresh instructions were inserted in the Queen's Regulations, and officers commanding regimental and recruiting districts were ordered to take steps to provide reserve soldiers of good character with suitable employment. Registers were established, and certain forms of procedure were prescribed.

This system proved to be productive of only poor results, except at a few stations, and, in 1892, the question arose as to the best form of organization for carrying out this important duty.

Three ways of so doing suggested themselves:—

(i) Officially by means of a department of the War Office as heretofore.

(ii) By leaving this duty to be carried out entirely through private organizations.

(iii) By a carefully organized combination of these two agencies.

The objections to the first plan are that it would tend to discourage private exertions, from which more effective results are to be expected. Moreover the expenditure incurred in its administration as a public department would be considerably more than if it were worked by a non-official agency.

As regards the second plan. If this obvious duty on the part of the nation were left to private effort alone, unassisted by public funds, and unsupported by authority, satisfactory results could hardly be expected. It was therefore decided to adopt the third course and combine these two modes of agency. Whilst the War Office, through the military department, ensures military co-operation towards maintaining regimental registries and employment associations, which are now so placed and organized as to cover the whole ground, it also provides such funds as may be necessary to enable the centrally located and non-official "National Association," to promote the work of these associations,¹ which have been brought into existence voluntarily and placed in connection with it.

The detail of the present system is as follows:—

In each regimental district a regimental employment association has been formed by voluntary efforts. Out of a council composed of the most influential men in the county, irrespective of their occupation, profession, or form of religion, an executive committee is chosen. The council has for its president, if possible, the lord lieutenant of the county (or of one of the counties) embraced within the area of the territorial regimental district. The leading spirit of the executive committee would naturally be the officer commanding the regimental district.

Where there are more counties than one in a regimental district it is deemed best that county committees should be formed to act in concert with the district association, as it is considered that the more decentralized and localized the machinery the better and the easier will the work be done.

In addition to these regimental district associations others have been in existence for years past, under the auspices of the National Association, in some of the large and populous centres of trade, such as Leeds, Manchester, Liverpool, Birmingham, Newcastle-on-Tyne, Glasgow, Edinburgh, and Dublin: some of these have, however, been to a great extent voluntarily called into existence by the recruiting staff officers, who will remain as active members on the executive committees which will administer them as *branches* of the National Association. By this system the whole of the United Kingdom is covered by a network of decentralized non-official associations, acting in concert with a central authority, and in contact with employers of labour of every kind.

In 1892 arrangements were made by which the chief railway companies opened out a field for the employment of a

¹ The National Association for Employment of Reserve and Discharged Soldiers, head office, 12, Buckingham Street, Strand, founded in 1885.

considerable number of reservists and pensioners.¹ All the departments of state were, in 1893, officially asked by the Secretary of State for War to give preference to soldiers over civilians for employment in posts for which they may be fitted. The War Office, and later, but with more ample means, the Post Office, have carried this principle into practice; it is to be hoped that other public bodies, whether government, county, or municipal, will act in a similar manner. If it can be shown that the surest mode of obtaining official posts is to pass through the ranks of the army, more will be done in this way to fill the ranks with men of good character than any increase in pay or emoluments could achieve. And by this application of the principle of natural selection, both the army and the departments concerned would benefit.²

RESERVE OF OFFICERS.

The officers composing the above have no corps organization, but are available for general service. Except when actually serving, they are not assigned to regiments, and do not enjoy any promotion. The vast importance of having in readiness an ample body of trained officers to draw on in cases when the army has to be mobilized is so obvious, that the subject fully merits a prominent position in a work of this kind.

The reserve of officers was formed in 1880 for the purpose of enabling vacancies to be filled on any sudden expansion of the army on an emergency; and, equally, for duty with the troops, as for the many posts, especially those connected with the line of communications, which have to be created when an army is on service in the field.

The quarterly official Army List shows the Reserve of Officers under two categories: (1) those of the regular service who having retired on pension

¹ For details see pamphlet issued by the War Office in October, 1892.

² Prominent among the successful institutions which aim at supplying the public with reliable *employés*, while at the same time ensuring to old army, and navy, men an honourable means of livelihood, is the Corps of Commissionaires, Exchange Court, Strand, W.C., founded in 1859 by its commanding officer, Captain Sir E. Walter, K.C.B. It has eight out-quarter divisions at Belfast, Birmingham, Edinburgh, Glasgow, Leeds, Liverpool, Manchester, and Nottingham. The men contribute to a retiring fund out of which provision is made for them in old age.

or gratuity are liable to service on emergency, and (2) those who have been permitted to enter the reserve and assume this liability.¹

The conditions of entry and of service are laid down in the royal warrant, 1893, articles 103, 103A, 242A, B, and C, and section VII. Category (1) is filled as stated; the operation of the rule being that under our existing system every officer retiring from the army on pension or gratuity is liable to serve if within the prescribed limits of age. Category (2) is filled as follows: quoting from the royal warrant for pay, &c., 1893, article 519:—

- (b) Officers who having retired from Our Regular Forces without a liability for further service, or from our Militia, may apply for and be granted Commissions as Army Reserve Officers.
- (c) Officers of Our Yeomanry Cavalry or Volunteers, who may desire and be permitted to hold Commissions as Army Reserve Officers in addition to their Commissions in Our Yeomanry or Volunteers.
- (d) Officers who having retired from Our Indian Military Forces, may apply for and be granted Commissions as Army Reserve Officers.

In every case the officers serve in the ranks held on retirement. For appointment as field officers they must not be over 50, for captain 45, or for subaltern 40 years of age. Of (b) it may be said that the officers retired from the regular army comprise only² those, and they are but a small number, who have not served twelve years (under present regulations, fifteen), i.e. not long enough to become entitled to any retiring allowance.

A retired officer of militia can join the reserve, but a volunteer officer must join it while serving, and is then allowed to remain in it, when retired from the volunteers, on fulfilling, among other conditions, the somewhat onerous one, common to him and to retired militia officers, of undergoing training with a regular regiment at his own expense one month every year. Further, a volunteer officer is not eligible for appointment as captain in the reserve after 35, or as subaltern after 30 years of age.

Officers of reserve are removed from the list of field officers on attaining the age of 55, or, if captains or subalterns, that of 50 years.

A "special list" is kept up at the commander-in-chief's office on which are entered the names of reserve officers accepted as willing to serve not only on general mobilization, but on any emergency connected with active service. These officers could always be relied on as ready for any service at all times.

¹ Of these there were on 1st January, 1893,

					Under (1)	Under (2)
Generals	..	..	..	..	89	0
Colonels	..	..	..	..	7	0
Lieut.-Colonels	..	..	..	..	274	3
Majors	..	..	..	..	520	5
Captains	..	..	..	..	427	160
Lieutenants..	..	..	..	..	22	164
Riding-masters	..	..	..	..	5	0
Quartermasters	..	..	..	..	24	0

² Officers who, under the old regulations, have retired by sale of their commissions, are also eligible as long as there are any within the age limit.

The general result of the arrangements is that a scant proportion of reserve officers is provided in the junior ranks, where they would be most wanted, and that the system does not lead towards any automatic improvement in this respect.

The arrangements in Continental armies for supplying a reserve of officers have been shown in Chapter VI., p. 80.

In this country, hitherto, no direct attempt to fill the junior ranks of the reserve has been made, yet it seems probable that, constituted as society is, certain classes might be found willing to give a qualifying service in order to enjoy a position of honour if it were understood that the obligations entailed were due only on emergency.¹

¹ 986 captains and 1,249 subalterns are known to have retired from the volunteer service in the last four years. In the great majority of cases these officers did not belong to the reserve, and their services have become lost. The number of subalterns who thus retire from the volunteers is about 300 each year, and in very many cases their retirement is occasioned solely by a change of residence, which makes it impossible for them to continue to serve with their corps.

CHAPTER XX.

THE STAFF.

1. *Definition.*

THE term Staff—*État-major*—*Generalstab*—designates the body of officers who act as agents of the generals in command, in caring for and directing the proceedings of the troops and in the administration of the affairs intrusted to the said commanders. It is in this sense that the “staff” and the “staff officers of the army” are generally understood in common parlance.

But the expression “staff” has a wider signification, and is used almost in its lay sense. We recognise the staff at headquarters,¹ *i.e.*, the officers employed in army administration at the War Office; each battalion, or cavalry regiment, has its “staff” of adjutant, quartermaster and riding-master, —so-called because they do not belong to the companies or components of the regiment but to its headquarters administration; also those officers, sergeants, and others of a militia battalion, who are maintained at its headquarters on duty when the men are dismissed to their homes, are known as its “permanent staff.” Besides these uses, the term is freely employed in the British service; all general officers or colonels in command of districts, &c., are gazetted to the staff of the army, and their pay is shown under that head in the army estimates. We have also the Indian Staff Corps, on the list of which are borne the officers serving with the native regiments of the Indian army, and in other appointments under the government of India; and,

¹ The headquarters staff and their duties in administration are dealt with in chap. xxiv. (War Office).

latterly, the word has been made use of in the title "medical staff," conferred on the body of medical officers of the imperial army.

In spite of minor differences, the idea of the staff in the sense of agents ministering to a higher power, is prevalent throughout all these uses of the word, which, however, is employed, as is customary in the English language, not in accordance with any precise theory but as may be most convenient.

It is with the staff of the army in the sense first spoken of in this chapter that we have now chiefly to deal.

2. *Historical.*

From an early period during the wars succeeding those of the middle ages, when armies ceased to be composed of the personal following of knights and chiefs of feudal times, and were regimented, we find the duties of the officers who assisted the commanding general as his staff to have been grouped under two heads; the numbering, arming, and ordering the troops fell to the adjutant-general, and the camping, quartering, direction of marches, and of provisioning to the quartermaster-general. In some armies an intendant was concerned with the supply of provisions. This dual government of adjutant and quartermaster-general, alternately in the ascendant, gave rise to friction; it was retained in some countries, *e.g.*, Austria, to a comparatively recent date,¹ and in England still later, but Napoleon's staff, under Berthier as *major-général de l'armée* or chief of the staff, was a homogeneous body, and the "*chef de l'état-major*" was an institution in every French army corps. In the British service we find a "chief of the staff" recognized for the first time in the Crimea, and again in the Indian Mutiny campaign in the person of Sir W. Mansfield. Since then the necessity of focussing, so to speak, the labours of the staff was, in the British service, realized progressively, and, for operations in the field, a "chief of the staff" has since 1857 been usually appointed. The practice thus established became law in 1888, when an army order directed that in every general officer's command one officer should always be named as chief staff officer; but a first step towards facilitating such a change had been taken in 1871 when the practice was introduced, in appointing officers to the staff, of gazetting them as deputy, assistant, or deputy-assistant adjutant and quartermaster-general, whereby it was left for ulterior arrangements to determine the precise line of duty they should undertake from time to time.

Again, this had been facilitated by the circumstance that in the conflict or at least inharmonious working between the old adjutant-general's and

¹ Brockhaus' "Conversations-Lexicon," 1865,—*Stab* and *Generalstab*.

quartermaster-general's offices in districts and at stations, the former had come to, so to speak, swallow the latter so far as influence and initiative was concerned; the adjutant-general had become the recognized issuer of all orders and the officer to whom the troops looked as the principal agent of the general commanding; the quartermaster-general was still occupied with movement and quartering, but with limited functions, since the executive part of such work, as to quartering at least, fell to an army department.

The arrangement above referred to of appointing officers to the staff as assistant adjutant and quartermaster-general was continued until 1888 when, in connection with increased financial and other responsibilities entrusted to the Commander-in-Chief by the Order in Council of the 21st February, 1888, the duties of the general staff were revised and extended and a great change was effected.

The commissariat and transport staff, which had previously been represented in each command, was permitted to lapse, or rather the officers actually occupying this position, and who were responsible for the supervision and control of supply, transport, and certain other services, were amalgamated with the general staff. As vacancies occurred amongst them, however, they were filled indifferently from officers on the supernumerary list of the old commissariat and transport staff now converted into the army service corps, (an old title revived), and from officers of the general staff.

The effect of the change referred to was that although the whole staff was now styled as of the adjutant-general's branch, whereby it gained or retained prestige and influence, and while the whole direction and conduct of military operations, in the strategical and scientific sense, tended to be exercised more and more by the general in command in person, with the adjutant-general proper as his mouthpiece, the functions recognized of old as belonging to the quartermaster-general's section of the staff were restored to it; thus new life and power was given to what was dead, and, at a time when it was a matter of policy to give generals in command real financial responsibility, the duties, which had before been performed by officers of the commissariat, transport, and barrack departments with a *quasi* individual responsibility, were assigned to officers on the staff of the general commanding, acting in his name and towards him as his responsible advisers. We refer to the division of the staff termed "adjutant-general B," the precise nature of whose duties is described in the following chapter.

The change of system, as here indicated, was a remarkable one, and peculiar to the British service. The result of the amalgamation, so far as such was effected, was a levelling up of what were formerly regarded as departmental and somewhat inferior duties to their proper consideration and importance, whilst, at the same time, a new sphere of activity was thrown open to the officers of the army at large who were enabled, by means of a careful system of instruction in the duties formerly known as commissariat, to qualify themselves to perform interesting and responsible work which previously had been to them as a sealed book. Moreover, the new system tended to spread through the army at large a knowledge of these duties so that at need a greater number of officers would be found capable of undertaking them than heretofore. It is in accordance with the temperament

of our race to desire practical work to do, and to prefer this during the long years of peace to study and make-believe ; it is difficult to get an Englishman to prepare for what he cannot practise ; regret may be felt for this, but it is well to take account of the fact, and therefore we may the more welcome a system which gives a wide field of selection and a good economical method of preparation for a section of staff duties of the most important kind whether in peace or war.

The title quartermaster-general is still retained for greater convenience at headquarters, War Office, for the head of the department and for his assistants. Although all are distinctly under the adjutant-general their duties at headquarters are sufficiently special to make it useful for them to be known by a distinctive name, but this fact lends no argument for the extension or restoration of the title of quartermaster-general to any members of the staff elsewhere, for they are not members of the quartermaster-general's department at headquarters, but officers under the general commanding, some of whose duties correspond merely to those of the quartermaster-general at headquarters.

3. *Staff Systems in Continental Armies.*

As the staff system was developed to meet the requirements of increasing and more highly organized armies, it became evident that, if good results in the field were to be obtained, the officers employed would not only have to be carefully selected, but would have to undergo a thorough training in the duties with which they were to be entrusted. To meet those requirements a special body of officers was created for carrying out the duties more immediately connected with military operations, and institutions came to be established at which officers selected from regiments underwent a special course of training.

This system has for many years been extended to all European armies, but with important differences in application. It is in Prussia that the general staff system has of late years received its highest development. It will, therefore, be useful to give a brief description of its organization in the German army before proceeding to describe our own system.

The future officers of the staff (*Generalstab*) are taken from their regiments to be trained at a special military school (*Kriegs-Akademie*) and afterwards with the great general staff (*Grosser Generalstab*) at Berlin. When ultimately

employed on the staff their functions are generally confined to the higher duties connected with the direction of the troops in war, and to their movements and instruction in peace.

After being attached to the great general staff, and having satisfied the chief of the general staff as to their capabilities and fitness for the duties, they are appointed to the staff of an army corps, or to the great general staff. With every army corps there are a chief of the staff and two general staff officers, and with each division, one such staff officer.

The small number of these officers has been often compared with the larger number employed in the British army; but such a comparison is very misleading, for the duties performed by the officers in the two armies differ considerably. In the German army the duties carried out by the staff of each army corps or divisional command are divided into four sections. One only of these sections is administered by the officers of the general staff. Their duties in peace embrace matters connected with marches, quarters, movements of troops, mobilization, roads, railways, telegraphs, bridging and pontooning, maps, reconnaissances, and neighbouring foreign armies; while, in war, they work out the arrangements for quartering, security, marching, and fighting, communicate orders to the troops, and obtain, collect, and work up information concerning the nature and military features of the theatre of war. The remaining three sections deal with all other subjects, personal matters, regimental duties, recruiting, discharges, arms, ammunition, discipline, military law, and the administrative services in all their branches. To enable them to do this one section has special officers of the adjutant's service attached to it, and the others officials of the auditor's,¹ and intendant's services who carry out all duties of courts-martial and supply; but these do not form any part of the general staff.

¹ Auditors. The term is applied in Germany and Austria to the staff concerned with the administration of military law.

The so-called "Great General Staff" acts as a feeder to the staff of divisions, &c. At this establishment, in Berlin, there are always a number of officers studying and practising their profession, and from it, as from a *depôt*, the wants of the service are met. Whilst employed at Berlin the members of the great general staff are engaged on professional, though not executive work; they collect and collate military information on foreign countries, and study and are trained under proper supervision. By this means the character and ability of individuals become known.

Thus the great general staff at Berlin has two functions, one being to study and collect military information concerning its own and all foreign countries, and the other to serve as a nursery and practical training school for staff officers.

This latter is of great importance. The governing idea in organizing the leadership and direction in war of the huge machine of the army is that all concerned, generals, staff, and regimental officers, should each know their own work so well, be so fully conversant with that of the others, and be so habituated to execute any task set them, that no supreme talent or extraordinary development of powers is required anywhere in order to attain a reasonable prospect of success. At the same time the labour of drawing up orders is reduced to a minimum when the person addressed has only to be given full knowledge of the situation, and of the rôle he is to play; the sender of the order having full assurance that the recipient will, for his part, do everything, and give every subsidiary order to his subordinate chiefs, that is expected of him. In short, the superior officer should never have at the last moment to feel the necessity of dry-nursing his subordinates in the next or any other grade of the hierarchy.

The training of the great general staff at Berlin under the chief of the staff, which is conducted not so much in a spirit of theoretical study as at a college under professors, but in that of a working body, engaged on the elaboration of

military problems of an advanced and practical kind under the critical eye and advice of a competent chief, has done much to establish that uniform system and common method in the German army, which has led to so great success. All ranks understand the game and play up to each other's hands with the utmost mutual confidence of reciprocal co-operation.

In the French army formerly, and for many years, the staff were taken from a *corps d'état-major*, to which officers were posted from the commencement of their career. This led to the army being directed by men who were out of touch with it. Their staff officers are now, however, drawn from, and revert to regimental duty as in the other continental armies.

4. *The General Staff in the British Service.*

The duties of the general staff are defined in the Queen's Regulations, Sect. V., as comprising "the supervision and control, under the general or other officer commanding, of all army services." The regulation goes on to classify these duties under three heads "A," "B," and "C," which may be briefly stated thus: "A"—discipline and training; "B"—equipment (in its general sense), supply, transport, movement, quartering, and hire of land; "C"—engineer services, which are specially under the district commanding royal engineer. The general allots the services to his staff, but the regulations set forth that it is undesirable to "mix up the subjects of these three groups as the work of any one officer." Unity of control is provided for by the rule that where there is more than one staff officer one will be "named in orders as the chief staff officer," and further by the introduction of the system of a "central registry" for all correspondence in the headquarters office of every district, &c. Except in larger commands, as in that of Ireland, the officer in charge of each group transacts his work customarily with the general direct but after conference with the other staff officers concerned, and, it may be, in the presence of the general who would

often have his own directions to give as to the initial steps to be taken in dealing with the subject under review.

A clear understanding of the footing on which a staff officer conducts his duties is important. When he issues orders it is understood that they are those of the general or officer commanding, whose authority covers all the acts of his staff. In addressing those under the command of his general a staff officer signs his communication "By order," signifying that he is merely the instrument for conveying his general's instructions. But when communicating with another staff officer in the same command, and *a fortiori* with a staff officer of another command, the words "By order" are omitted.¹

The source of supply of staff officers is, generally speaking, the Staff College, to which officers from regiments proceed. Officers of proved ability in staff duties in the field are from time to time placed on a special list as eligible for staff employ, and, further, since the introduction in 1888 of the division of staff work under "A" and "B," to which reference has been made, officers of the army service corps, who are not staff college graduates, are in many instances appointed to the staff with a view to their employment in the "B" group of duties.

The duties of administration by officers of the headquarters staff at the War Office are fully dealt with in Chapter XXIV., but those of the Intelligence division may be further referred to. It has been developed to its present proportions from the nucleus of the old Topographical Department of the War Office, and is under a general officer in the military department of the War Office. In this division a number of officers who have been trained at the staff college are employed in collecting military information concerning all countries. So far its work resembles that described as done by the German great general staff, but it does not, as the latter establish-

¹ See Q.R., sect. xxi., para. 17.

ment does, receive officers for further training in general staff duties. All our officers of the staff learn their work through its practical exercise at the stations to which they are appointed, with such opportunities as may there offer, and there is no general training ground for the prosecution of studies in theory and practice combined, such as has been described above as existing at Berlin.

The general staff includes the military *attachés*. These are officers selected for their special qualifications, and particularly for their thorough knowledge of the language, to be attached to British embassies accredited to the principal military powers of Europe. The position is a delicate one requiring great tact, for the object of the appointment of these officers is that they may bring to the notice of their chief, for the information of the Foreign Office, whatever is worth record in the military system of the country in the capital of which they are located. Practically, the appointment of military *attachés* has a double advantage for the state. These officers gain and communicate information, and they also acquire in their own persons a valuable experience of the system of organization and instruction of armies, which, in their subsequent careers, they may be able to apply for the benefit of their own country.

Reverting to the general staff in districts, two important branches have not yet been named—viz., the instructional staff and the musketry staff. The former was first introduced by the appointment in 1870 of garrison instructors. A new era in the military instruction of the British officer was opened when examinations were directed to be held in tactics, fortification, topography, and military law, and qualification in those subjects was made obligatory before promotion to the ranks of captain and major respectively. To assist officers to prepare for these examinations garrison instructors were appointed to the staff of the larger commands, under whom classes of officers were assembled twice yearly.

The higher standard of military knowledge attained by officers in consequence of this arrangement has been very marked. Owing to the increased demands now made at the entrance examinations, the necessity for these instructional officers is no longer so great as it was, but they are still of value in directing the studies of officers, and preparing them to qualify for a higher grade. They have, therefore, been retained, though in reduced numbers, with the changed title of deputy-assistant adjutant-general for

instruction.¹ The object of this change has been to admit of their being employed, when not occupied with instructional duties, in assisting in the general staff duties of the command in which they are serving.

The musketry staff (exclusive of that at the School of Musketry, Hythe, which is treated of in Chapter XXV) consists of officers termed district inspectors of musketry. They are appointed to the larger commands for the purpose of assisting the general officer commanding in the general arrangement and supervision of the musketry training of the troops. They arrange for the allotment of the troops to ranges, organize the schemes for field firing on a large scale, and advise on all musketry questions that may incidentally arise, notably those in connection with the construction or safety of ranges.

There are, further, an inspector and an assistant-inspector of army signalling and an inspector of gymnasia for the army at home, who inspect and report on the army and volunteer signallers and the gymnastic instruction respectively, besides supervising the establishments described in Chapter XXV.

Subordinate staff. Besides the officers employed on staff duties there are also warrant and non-commissioned officers and soldiers transferred to serve (i) on the garrison, district, or general staff of the army; (ii) staff clerks in the general staff offices.

Under the first category are included staff, garrison, or camp sergeant-majors or quartermaster-sergeants. These are permanent appointments in the larger garrisons and camps, and are filled from deserving warrant, or non-commissioned officers. Their duties vary considerably according to the nature of the command.

The second category has lately undergone an extensive reorganization; previously there was a special corps of military staff clerks, administered at headquarters and serving in the general staff offices under the orders of the chief staff officer. This was not found to be a satisfactory arrangement, partly owing to the absence of any permanent home or head to the corps and partly to the fact that the corps consisted for the most part of non-commissioned officers holding the rank of quartermaster-sergeant, which had the double disadvantage that their prospect of further advancement was small, and that all the work, however simple its nature, had to be performed by highly paid non-commissioned officers. An endeavour has this year, 1893, been made to remedy these disadvantages by the institution of a staff clerk section as an integral part of the army service corps. The section consists of three divisions, the first composed of staff sergeant-majors (warrant officers), the second of staff sergeants and staff quartermaster-sergeants, and the third of sergeants, corporals, second corporals, and privates.

Personal Staff.—The officers included in this category are those holding the appointment of military secretary, assistant military secretary, assistant military secretary and aide-de-camp combined, and of aide-de-camp. These officers

¹ *Quod* instructors these officers take their orders from the Director-General of Military Education.

are appointed to the posts they hold on the staff of the general officer on his recommendation. At headquarters there are the aides-de-camp of the Sovereign, and the military secretary and aides-de-camp of the Commander-in-Chief in the United Kingdom. One home command alone, that of the commander of the forces in Ireland, has on its staff an officer of the military secretary branch, who is an assistant military secretary. In India and in the more important Colonial commands there is either a military secretary, an assistant, or an assistant and aide-de-camp combined, according to the relative importance of the command; and in many of them, these officers are represented both on the staff of the governor and on that of the officer commanding the troops.

The officer holding the post of military secretary is the confidential staff officer of the general officer to whom he is attached. He is the channel of communication on all subjects connected with the promotion, transfer, exchange, or retirement of officers, the confidential reports on the qualifications of officers, and any other matters not dealt with by the general staff proper.

Aides-de-camp are appointed in certain proportions to general officers commanding according to their rank. If not staff college officers they are required to pass the examination for captain, and also in French, before confirmation in their appointments.

5. The Staff of a District Command.

The tendency of recent military legislation has been to give increased responsibility and powers both to general officers in command of districts, and also, in the case of officers commanding at stations, to recognize them as the representatives of the general, and as more responsible than heretofore for the conduct of the military command with which they are temporarily identified, and thus to train them for higher responsibilities; this is especially noticeable in arrangements for defence schemes.

A general officer commanding a district is the representative of the Commander-in-Chief, and is responsible for everything in his command to the War Office. All correspondence except in minor details of *personnel* or routine is addressed to him. Besides the efficiency of the troops, armaments, works, and buildings, the duty of compilation of estimates and the economical control of all expenditure whether of money, supplies, or stores, the inspection of reserves and mobilization equipment, and the organization and preparation for defence are held to be his particular care. Formerly many of these services were conducted in practice, if not in theory, independently of the general commanding; but it has become recognized that such a limitation of powers and practice in peace was a poor preparation for the increased responsibilities which would devolve on such an officer in war.

The duties of inspection are referred to in other chapters, particularly in that on infantry. Generals furnish annually, on the 1st January, a comprehensive report on the progress and condition of all services, on the general condition of all mobilization stores, and on the working of new equipments or new institutions.

The staff of military districts and commands in peace, vary considerably according to the strength and composition of the troops comprised in them and on the special duties that have to be provided for. The Western district in England, the headquarters of which are at Devonport, may be taken as a typical one having a complete staff. The following is its composition:—

In command	{	The Lieutenant-General (with Aide-de-camp as personal staff).
Staff of	{	2 Assistant adjutant-generals.
general		2 Deputy-assistant adjutant-generals (of whom one is for instruction).
officer		1 District inspector of musketry.
commanding		Officer commanding Royal Artillery (Colonel on the staff).

Staff—
continued. { 1 Brigade Major, Royal Artillery.
 { Commanding Royal Engineer (Colonel on
 { the staff).
 { Principal medical officer.
 { Senior ordnance store officer
 { District paymaster.

Tables showing the staff with army corps and divisions in the field are given in the Appendix.

CHAPTER XXI.

SUPPLY, TRANSPORT, AND ADMINISTRATION.

1.—*General System. Organization for War:*

IN attempting a short description of the supply, transport, and barrack services of the army it will be convenient to explain, as a first step, who are the different officers responsible for the administration and execution of these duties.

Under the provisions of the Order in Council of the 21st February, 1888, the Commander-in Chief is charged with—

“Obtaining, holding, and issuing to all branches of the forces, food, forage, fuel, and light, &c., &c., and with exercising a strict control over the expenditure of such supplies.”

These administrative powers are exercised through the Quartermaster-General to the forces. The general or other officer commanding a military district is immediately responsible to the Commander-in-Chief for the efficient and economical performance of all supply, transport, and barrack services in his command. Officers with knowledge of these services are placed on the staff of commands and districts for the purpose of assisting in their administration.

Officers of the army service corps are detailed at the various stations for executive duties and the supervision of details of the supply,¹ transport, and barrack services.² At the principal home stations these duties are carried out almost entirely by the officers and the men of the corps, but, at many stations, and especially abroad, civilian and pensioner subordinates and natives are necessarily largely employed as part of the local army

¹ A technical term meaning food, forage, and consumable supplies, not the general supply of stores and equipment.

² See chap. xiv.

service corps establishment. In this sense the army service corps means the staff working under the officers of the corps upon the supply, transport, and barrack service of the army rather than the corps of the regular forces known by that name.¹

A responsibility has lately been specifically fixed on commanding officers of units of troops for the correct receipt and issue, regimentally, to their men of all supplies, and forage for horses.²

Of late years greatly increased powers have been conferred on the military authorities, in all that concerns the supply, transport, and barrack requirements of the troops. All instructions on these subjects from the War Office are now conveyed to the general or other officer commanding, and not, as under some early organizations, to the head of a department attached to his command, whose semi-independent position experience showed to be productive of friction and a want of efficiency. At the same time it is important to remember that with these increased powers, a responsibility is cast on general and other officers commanding at home and abroad to maintain the efficiency of these services as part of their normal duties. General officers commanding are therefore expected to deal themselves, through their staff, with all routine questions of administration covered by the regulations, and, where report to headquarters may be necessary, they are required to record their opinions or recommendations, with observations, based on local knowledge, to enable the authorities to come to a final decision without further reference and correspondence.

During war the supply and transport services of an army in the field are placed under a general officer or colonel on the staff. His official title is "general (or colonel) of communications," and he also has command of the line of communications. He is the head of all the administrative services of such an army, responsible for their harmonious

¹ As described in chap. xiv.

² Q.R., sect. vii., para. 11.

working, and directly responsible, through the chief of the staff, to the general commanding in the field for keeping the army supplied with food, transport, and, in fact, all that may be required to enable it to accomplish its object. Upon all matters requiring reference to the War Office, he communicates direct, in the name of the general officer commanding in the field. When he is not in telegraphic touch with army headquarters, he must be represented there by an officer of rank who can act in his name. His duties are defined by the "Regulations for the supply of an army in the field and for the line of communications," and it is his special office to relieve the general officer commanding in the field of all administrative details regarding the wants of the army.

Supply and Transport in War.—The *supply* duties of an army in the field are placed under a senior staff officer on the staff of the general of communications.¹ He is assisted by other staff officers at the base, at stations on the line of communications, and at the advanced depôt, as required. Under his control, the supply duties of the army are divided into two great sections—viz., those with the troops in front, and those on the line of communications—each under a staff officer. The companies of the army service corps detailed for duty at the base, on the line of communications and at the advanced depôt, contain the "supply" *personnel* of officers and men who carry out the executive details of the supply service at those stations.²

In the field army, i.e., the troops in front of the advanced depôt, staff officers are attached to army corps headquarters, as well as to the staff of divisions, for the administration of supply and transport services with the units composing them, and the supply *personnel* for executive details is furnished by the army service corps forming part of those units.

The *transport* of an army in the field is placed under a staff officer styled the "director of transport," who is an officer on the staff of the general of communications. He regulates the employment of such of it as is "regimental transport" under circumstances where it may not be required regimentally, and is generally responsible for its maintenance in a state of efficiency. The transport is thus divided:—

(a) "Regimental transport":—the transport permanently assigned to the various units for the conveyance of their equipment, ammunition, tools, baggage, one or more day's food, &c., &c., and with which, as to officers, drivers, horses, and carriages, the regiment or unit would, as a rule, be equipped before taking the field, as part of its war establishment.

(b) "General transport":—transport found by units of the army

¹ Regulations for the supply of an army in the field, &c., &c.

² See chap. xiv, and for details see pp. 200, 201, Field Army Establishments (Service abroad).

service corps for duties analogous to those mentioned under (a) towards units such as the staffs of divisions and brigades, the bearer companies, and the field hospitals in front of the advanced depôt. General transport also includes the army service corps transport on the line of communications, at the base, and at the advanced depôt, and in it is merged any local (or auxiliary) transport of the country.¹

(c) Artillery transport:—such as ammunition columns, and regimental transport of this arm. The officers, drivers, horses, and carriages would belong to the Royal Artillery.

(d) Engineer transport:—for carriage of technical material such as that of pontoon troops, field companies, &c.; also the regimental transport for use as at (a) of this arm. The officers, drivers, horses, and carriages would belong to the Royal Engineers.

Regimental transport (a), and that portion of the transport under (b), (c), (d) employed with the army operating at the front is essential to the mobility of the different units; it is rarely possible to utilize it (although this may exceptionally become the case) to any extent for general transport service. While, therefore, the director of transport supervises the above and replaces losses among the animals, he is chiefly concerned with the transport on the line of communications. This must always consist very largely of the local or auxiliary transport, or the generally vast accumulation of vehicles or pack animals moving between the base and the advanced depôt, or supplementing railway transport at fixed points, and conveying to the front the large quantities of food, stores, &c., required by an army in the field. The efficiency of this transport largely depends on its organization in suitable cadres for supervision and work, and, as units of account. In effecting this organization advantage should be taken of the existing cadres of companies of army service corps; rather should their establishment be expanded by the addition of local transport, than additional units of transport be improvised from local resources.

The companies of the army service corps detailed with the troops operating in front keep touch with the advanced depôt by means of their "supply columns," which are always passing from the advanced depôt to the front and returning to re-fill.

Railways, when they exist, are of course the best means of transport on the line of communications; the traffic on them, constituting, as it does, a portion of the general transport of the army, is worked under the orders of the director of transport, though an officer styled the "director of railways" has charge of the *personnel* and technical working. Similarly, inland water transport would naturally be made use of when available on a line of communications. If this is manned by the Royal Navy, it is under the charge of an officer of that service, who would, however, work under the orders of the general of communications, conveyed through the director of transport. If manned by soldiers or civilians, such portion of the water transport as might not be of the nature of "regimental transport" would be placed under an officer of the army service corps, under the orders of the director of transport.

¹ See chap. xiv.

2. *Administration.*

(a) *Supply, Barrack, and Transport Services.*—In the introduction to this chapter it is shown that the administration of the housing and furnishing, provisioning, and transport of the troops rests with the general officers commanding in the various districts, &c., and that portions of an executive corps of the regular army, called the Army Service Corps, are assigned to each command in peace and war for the execution of details. Also, as it has been explained in the previous chapter, the staff of commands and districts has been augmented in view of these duties, which have become “staff” duties.

It is impossible within the scope of this chapter to define the precise mode of supply to the troops of their multifarious requirements in the way of provisions, forage, barracks, and transport in peace and war; the circumstances of the service of the British army in all parts of the world are so various as to make this hopeless. The normal conditions are dealt with in various regulations, viz. :—

“Regulations for army service corps duties.”

“Allowance regulations.”

“Regulations for the supply of an army in the field, and for the organization of the line of communications.”

“Supply hand-book for the army service corps,” sixth section.

Staff officers administering army service corps services, as well as the officers of that corps must be business men, and adapt themselves to the conditions of their position. There must ever arise occasions calling for tact and discretion which no regulations can precisely cover. Neither is there any mystery in regard to the procedure called for which common sense and regard for the interests of the state and the troops cannot cope with.

The requirements of the troops are to a large extent provided for under contracts, the system of which must

necessarily vary according to circumstances; it will be seldom found impracticable to resort to contracts in some form or another. Contracts may be:—(a) for a given period for supply, or performance of specific services during a period.¹ (b) for specific quantities or services.

All conditions attaching, prices payable, and proper securities for performance, must be clearly expressed in business language: printed forms and conditions of contract for normal requirements exist for guidance in these matters.

It is a principle of good administration to make contracts, when time admits, only after inviting competition by the greatest publicity with a view to making the best bargain. An objection is often taken to this system that competition produces offers at prices which cannot buy what is wanted of good quality if honestly provided. This is just where administration comes in, however, to protect the state and the soldier. Each case must be examined on its merits, of course; but when a contract is made, good administration and reasonable rigour of inspection and supervision of work will either enforce efficiency or drive a dishonest or incompetent contractor from the field. It is not pretended that this may not often give trouble, but good administration surely includes taking trouble to secure satisfactory results, having regard to the circumstances of each case.

Here we may mention, in connection with contracts for bread and meat for the troops at home stations, that specially selected officers have recently been appointed as inspectors of rations, who are constantly travelling and paying unexpected visits to each military station at uncertain intervals. Their special duties are to ensure that supplies of bread and meat furnished by contractors are to the fullest extent in accordance with the conditions of the contracts. They do not relieve the local authorities of any part of responsibility for strict supervision in these matters; but rather by assisting the local officers, as experts in such questions, they afford them increased opportunities for forming correct judgments on points where doubts may exist. The inspectors report to the general commanding anything that calls for remark in the action of the troops or the contractors, and in cases of neglect, or of the supply of bad provisions by the contractors, the inspectors recom-

¹ The current contract rates for forage, fuel, and light, govern the money allowances payable to officers and others in lieu. Allowance Regulations, paras. 149 and 217.

mend the infliction of fines in accordance with the conditions of the contracts. Great improvement in the quality of the soldier's ration has followed the adoption of this system.

The responsibility of a regimental commanding officer in regard to the receipt, inspection, and issue of supplies has been already noted. He should exercise this in a practical way without interposing, where it is unnecessary, an additional link in a chain. It may be observed that it is a principle of our system to train officers in every position to familiarity with, and responsibility for, army administration within their own spheres of action; so that they may, when they attain to higher rank, or become eligible for staff employment, be better fitted to cope with business procedure, which, in earlier days, was too long regarded as a sealed book to the uninitiated. This principle is kept in view as regards officers commanding regiments, battalions, and other units and notably in the case of officers commanding troops at detached stations so far as circumstances admit.

Thus a commanding officer is himself responsible¹ that he gets articles of proper quality supplied to him in authorized quantities. To this end he makes himself acquainted with the conditions governing their supply, and by himself and officers is enabled to judge, not arbitrarily, but in a business way, whether supplies come up to the proper description; thus, whether the article is bread, meat, coals, hay, oats, straw or other supply, he assures himself that his men receive the quality and quantity to which the regulations entitle them. The army service corps takes the initiative, it aids the troops in every way, and does all it can to ensure the regularity of the service, and that the nature of the supplies *prima facie* accords with what is authorized, but the inspection in detail rests with the troops and their representative officers² and commanding officers. This rule is the outcome of much experience; it is held best that the duties of those who initiate the supply, or who deal with contractors, should be

¹ Q.R., sect. vii., para. 11.

² At large stations officers of the army service corps are often associated with the regimental officers for this duty.

thus defined, and that nothing in the regulations should hinder the responsibility of the officers representing the troops to see that the best article for their consumption is supplied. The regulations even provide that regimental quartermasters should attend to questions of quantity rather than quality—a contrary rule soon leads to a regimental or other functionary, who is, really, responsible to his commanding officer, or to the general, becoming a champion for the contractor, or for an article supplied from government stores.

(b) *Other services in the B group of duties supervised by the Staff.*—It has been already shown that the supervision and arrangement of the entire administration is centred in the staff of a general commanding,¹ and that the officers for B group duties must therefore have knowledge of these duties as their essential qualification. The same branch of the staff attends also to the services on which the troops depend for their clothing,² arming, ammunition, equipment, movements from place to place, camping, and to the hire of lands for camping purposes or firing ranges.

It will be well to notice here briefly what departments are immediately charged with these services and to what extent the troops depend directly on those departments. We can afterwards show by an illustration how the system practically works.

(i) *Clothing and necessities* are supplied by the Army Clothing Department. This is a branch of the War Office, not a department of the army under the local administration of general officers commanding. Officers commanding units obtain their clothing, &c., direct from the army clothing department, and correspond direct with the director of clothing, but questions regarding clothing requiring reference to a general officer commanding are dealt with in the B group. In the field and abroad the ordnance store department acts as agent locally for the director of clothing in England.

(ii) *Transport, Provisions, Fuel, Light, and Supplies of every kind for the use of all branches of the army. Allotment of barracks and quarters and their equipment.*³ The executive duties connected with these services are entrusted to the army service corps, the troops communicating direct with the officer concerned. Barracks and quarters are constructed and repaired by

¹ See chap. xx.

² Q.R., sect. v., para. 68, B.

³ *Ibid.*, sect. v., para. 72.

the Royal Engineers, but when "handed over," are held on charge by the barrack section of the army service corps.

(iii) *Arms and Munitions of War and all Military Stores, Clothing for use in Camps, and Storage and Issue of Clothing and Necessaries when in the Field.*¹ These are dealt with by the ordnance store department direct with the troops so far as the issues are provided for by regulations. This department also supplies the officers of the army service corps in charge of barracks with the stores required for their equipment, and maintains reserves of those stores.

(iv) *Movements of Troops, Hire of Lands and Buildings.* For these services the staff for B duties is executively responsible. It can be readily understood that from the nature of these services questions arise requiring action, in matters of detail, by any or all of the departments under a general commanding, in order to secure the object desired. Thus in the arrangements for hiring lands or buildings, the commanding royal engineer, as well as the senior medical officer, have duties of a professional and technical nature to be performed before any agreement can be closed and the land or building can be handed over to the barrack branch of the army service corps for use by the troops. All the preliminary action is therefore attended to in the B group.

(v) *Money.*—The receipt, disbursement, and account for moneys receivable or payable for military services under the instructions of the Secretary of State for War.²

Duties connected with the above, which so intimately affect every branch of the service, are entrusted to the army pay department, the officers of which, in their several commands and districts, are agents of the finance branch of the War Office, conducting their duties under the "Financial Instructions" issued by the Secretary of State for War. Normally, and at home stations, a general officer commanding, when required to intervene in any question of expense not covered by regulations, finds himself compelled to refer the matter for War Office decision. On active service, however, and abroad, cases requiring immediate decision and arrangement will arise which are dealt with under the orders of a general commanding through his chief staff officer, who, in both cases, at home or abroad, is the natural channel of communication.

(c) *Communication of Troops with Departments.*

With regard to the channels of communication to and from the troops in their dealings with the different departments, although the various services are arranged for in a general way under the administration of the staff, it is nevertheless an understood rule of the service that the commanding officer of a unit communicates with and applies direct to the representative of the department concerned for every article or service the supply of which is matter of ordinary regulation.

Thus all normal demands and correspondence about clothing are addressed to the director of clothing as already noticed. A requisition for transport or provisions, or an application for quarters is made direct to the officer of the

¹ Q.R., sect. v., para. 74.

² Financial Instructions, para. 1.

army service corps in charge of the particular branch of duty. An application for repair of a barrack or quarter goes direct to the Royal Engineer officer concerned; correspondence about a damaged rifle or a demand for ammunition is sent direct to the senior officer of the ordnance store department; and so on in all routine matters.

The rule obtains that a general or his staff is only referred to when there is some hitch or difficulty, or some point requiring the decision of higher authority; or when a commanding officer wants for some reason to obtain some issue, or the performance of some service not covered by regulations. In all such cases it is important that the question should be temperately and thoroughly discussed and prepared so that the reference may be clear and the point at issue may be ripe for the action of a general and his staff, who would only intervene when unavoidable.

(d) Classification of Services.

There are certain principles of classification of various services in the army the application of which experience only can thoroughly teach. Their knowledge, however, would solve doubts which arise sometimes as to what may be considered an engineer service, or a barrack, or ordnance store service, in some matter under consideration. For instance, generally, a movable article, as a mop, is classified as a store and is kept or maintained by the ordnance store department, though issued by the army service corps barrack section, whilst a fixed article, such as a pump and its handle, would be an engineer fixture. Certain articles, again, such as boats, may be engineer equipment under certain conditions, yet precisely similar articles of equipment are, normally, on army service corps charge, irrespective of the branch of the service to which they may be locally allotted for use.

A good knowledge of these rules of the service and customs bearing on the division of labour of the duties of administration is useful to all officers, and particularly to officers commanding units, as it enables them more quickly to help their commands and men to obtain that to which they are entitled, without friction and misunderstanding in correspondence.

(e) Illustrations.

The working of the system generally and the method of supply at home may be briefly illustrated thus:

A militia battalion, say from Ireland, arrives by sea at a headquarters district station where there is a general officer and a full staff. The ship would be boarded personally by a staff officer for B, who would give the officer commanding the orders as to landing. An advanced party would usually have been sent by rail, at least the previous day, under an officer. This officer, after reporting himself to the chief staff officer, would have been placed in personal communication with the officer of the army service corps in charge of barracks, who would put him in possession of the barracks to be occupied by his battalion, complete with the necessary furniture. On behalf of his commanding officer the officer would now arrange with the army service corps for his requirements as under—

- (i) For drawing the rations for his battalion; these should have been previously warned for by post when possible; for cooking these

rations, either by his own men or by men of a neighbouring battalion, or, failing this, to have them ready for cooking on the arrival of his battalion; for groceries and extra messing, to be supplied through a local canteen, or tradesman.

- (ii) For fuel for cooking, and warming rooms, also for light of barracks if not already provided.
- (iii) For transport, as required, to convey baggage of battalion to barracks; any sick to hospital, or any women and children to their quarters.

Thus, on marching in, the commanding officer should find all the requirements of his battalion either provided for, or, as far as may be, in a fair way of being complied with.

Supposing now sufficient quarters for his battalion are not available; he might be directed by the staff officer, to arrange for encamping a portion of the men. He would then requisition the ordnance store department direct for the necessary tents and camp equipment, producing the written authority of the staff officer, who would indicate the spot for pitching these tents.

All such requirements of a battalion arriving at a station should have engaged the attention of the local staff and the army service corps beforehand; but the officer commanding the battalion, and more particularly the officer sent forward to represent him, is responsible that everything to which his officers and men are entitled is provided for by timely action on his part, and he deals direct with all departments concerned.

The action to be taken by an officer, say a captain commanding two companies marching into some small detached station where there are already troops, would be on the same lines. He would find an officer in command at the station responsible that the requirements of the troops are properly complied with. There would be probably, if not officers, at least warrant officers or non-commissioned officers representing the different branches of the service appointed to carry out those details. With these the local officer would at once put the newly arrived officer in communication, intervening himself in any case of difficulty requiring reference to him or through him to the general commanding the district. It would have been the duty of the local commanding officer to have anticipated the wants of this incoming detachment, whether belonging to his own or any other corps, as far as possible; and he would probably have received orders on the subject from the headquarters of the district.

(f) *Conclusion.*—In bringing to a close this sketch of the existing system of administration, by military officers, of the supply, transport and barrack services in the British Army (India excepted), a point may be enlarged upon with regard to which the champions for that financial check on army expenditure which is inseparable from our constitutional form of government may feel some want of confidence. Under the said system the interests of the British tax-payer are no more

imperilled than the freedom of the subject is nowadays by the existence of a standing army. All acts of the military authority in matters of army administration, and all details of account, come under review in the accountant-general's branch at the War Office in their financial bearing on the cost of the army, and for the information of Parliament as may be required. This department of administration is presided over by the Financial Secretary of the War Office, a high official acting under the responsibility of the Secretary of State for War.¹ Economy of administration, correctness and punctuality of account and supervision of details are by no means relaxed by recent changes of organization. Rather has it been found that the fact of administrative powers being now exercised by soldiers having, in comparison with civilians, a fuller appreciation of military conditions and requirements and a better power of general control, has led as well to increased economy as to efficiency.

¹ See chap. xxiv. (War Office).

CHAPTER XXII.

THE MILITIA.

1. *Purpose and History.*

THE militia, "whose theory is conscription, but whose practice is voluntary engagement"¹ plays an important part in the system on which the British forces are raised, in that it offers military service to the class of men willing to give it for a month in the year for training or for the term of their engagement on emergency, but whose avocations do not lead them to become either regular soldiers or volunteers. Its object is to maintain in the United Kingdom a trained body of men available "in case of imminent national danger or great emergency," to supplement the regular army in the defence of the country. The Sovereign may in such cases direct by "proclamation"² that the whole or part of the militia shall be embodied for military service within the United Kingdom, in which case it becomes, until disembodied, to all intents and purposes, a part of the regular army for home service, and amenable to military law.

Although only enrolled for employment at home as above stated, the volunteered services of the militia when embodied have been accepted in the past, and may again be so accepted, for service at certain places out of the United Kingdom.

The "constitutional force" has in the past been so closely connected with the regular army that in describing the building up of the latter, we have of necessity had to deal to a certain extent with the militia in the first part of this book.

In this chapter, however, will be given a brief history of

¹ Mr. Cardwell.

² See page 523.

the force from its constitution in the reign of Charles II., showing its gradual development up to its condition at the present day, and omitting details as far as possible, but quoting the sources from which such can be obtained.

The establishment of the Militia dates far back into the history of England, and we find in the reign of Edward I. an Act decreeing that every freeman between the ages of 15 and 60 years was to be available to preserve the peace within his own county or shire, which he was not called upon to leave "save upon the coming of strange enemies into the realm."¹ This and other statutes bearing on the military obligations of the subjects of the realm of England were consolidated in the reigns of Mary and Elizabeth, and the lieutenants of counties were recognized as the legally constituted agents through whom, upon threat of invasion, all arrangements for the internal defence of the country were to be made. In the reign of Charles I. frequent disputes arose between the King and Parliament as to the command of the "trained bands" or militia, and it was in this reign, during a debate in Parliament, that the word "militia" first appears to have been brought into notice. "I do heartily wish," said Whitelocke, addressing the Commons on 1st March, 1641, "that this great word—this new word—the militia—this harsh word, might never have come within these walls."²

On the Restoration, one of the earliest acts by the new House of Commons was to establish the militia on a constitutional basis, and by the Act passed in 1662, owners of property were obliged, in proportion to the value of their property, to furnish horses, horsemen, foot-soldiers, and arms. The number was undefined, and substitutes were allowed if approved. The militia of each county was placed under the government and command of a lieutenant who was commissioned by the Crown and vested with the appointment of all officers, the Crown reserving the right to commission or displace them. The force was distinctly local; statutes declared what pay the soldier was to receive and how he was to be armed; for purposes of punishment he was dealt with by the civil authorities.³ All "trained bands," except those of the city of London and their auxiliaries were discontinued.⁴ The militia thus established on a firm footing in the reign of Charles II. enjoyed the confidence of Parliament and the public, far more than did the standing army also established in the same reign.

Yet it even was jealously watched, and after the revolution in 1688 an Act was passed in the second year of William and Mary for raising "the militia for one year," and for some time this Act became an annual one.⁵

In 1690, on the occasion of a French invasion, the militia was called out, and again during the rebellions in favour of the Old and Young Pretenders of 1715 and 1745; and later, in 1757, a reorganization of the

¹ 13 Edw. I., cap. 16; see Clode, vol. i., pp. 31, 32.

² *Ibid.*, p. 31.

³ *Ibid.*, p. 35.

⁴ These continued as trained bands until 1794, when they were by Act of Parliament reorganized as the London militia. See Raikes' Hist. of Hon. Art. Co., vol. i.; p. 148.

⁵ Clode, vol. i., p. 38.

force took place. It was in this year that the old obligation, to which owners of property were liable, for supplying so many men, horses, &c., was given up, this duty being instead imposed on the counties and parishes, which had to provide a fixed quota. The numbers required were fixed, and obligatory service by *ballot* was introduced. The period of service was for 3 years, the limits of age fixed at 18 to 50 years, and certain exemptions and substitutes were allowed.¹

An Act passed in 1758 was the first which officially recognized "volunteers" as counting towards the quota, the volunteer being freed from liability to ballot. In 1761 the raising of militia quotas was made compulsory on counties under penalty of a fine. T

In 1808 an important step was taken by Lord Castlereagh—viz., the establishment of a force of *local militia* in England and Scotland, in addition to the *general militia* then embodied, and as a general reserve for the whole country. It arose out of the Training Act introduced in 1806 by Mr. Windham, Lord Castlereagh's immediate predecessor in the War Department. The effect of the Training Act was, briefly, to raise by means of the ballot a force of 200,000 men to be trained for one whole year, and then to discharge them from training for two years. Any person chosen was to have the option of serving as an efficient in a volunteer corps. The place of training was to be within five miles of the man's home, and upon invasion the Crown might embody the men trained in that or the preceding year, and attach them to the regular army or militia, or form new regiments from them; they were not to serve out of Great Britain. This Act had so far taken effect when Lord Castlereagh took office in 1807 that the apportionment of 200,000 men had been taken, and the ballot and enrolment were being proceeded with. Evident difficulties as to how to train this force cropped up, and Lord Castlereagh formed a plan for a *sedentary militia*. The plan thus foreshadowed took shape finally by the creation of the local militia for England and Scotland,² and the experiment proved successful. The force was to be raised by ballot from amongst men of 18 to 30 years of age, the quota for each county consisting of such numbers as should be fixed by Parliament. Service was for four years, substitutes were not allowed, and the force was organized by regiments. A small bounty was to be given to those who should enter voluntarily, and it was only in the event of a deficiency of volunteers that the ballot was to be taken up.³ In the year 1812 the local militia acts were consolidated,⁴ and the returns of that year show the local militia with an establishment of 240,388 men, of which 214,418 were serving, and a force of 68,463 men out of an establishment of 99,368 serving in volunteer corps.

During the Peninsular war the militia garrisoned the United Kingdom and thus released the regular troops for service in the Peninsula and elsewhere, and in 1813 in virtue of an Act passed to enable the militia to serve abroad as *militia* with their own officers, three strong militia battalions joined the Duke of Wellington's army in France. Lord Castlereagh, as Secretary of State for Foreign Affairs, speaking in the House

¹ "Military Law," chap. ix., para. 71.

² Clode, vol. i., pp. 323-333. ³ *Ibid.*, p. 331. ⁴ 52 George III., c. 38.

of Commons on 11th November, 1813, stated that during the eight preceding years the militia had furnished 100,000 men to the army (or two-fifths of the total number of men raised for the army), and after paying a high tribute to the force, added, "Parliament ought always, therefore, to bear in recollection that it is to the militia we owe the character we at present enjoy in military Europe, and that without the militia we could not have shown that face which we have done in the Peninsula."¹

Both the local militia and volunteer force, together with the general militia, fell into disuse after the Peninsular war; the former has not been raised since 1815; but though the law for ballot and enrolment of local militia has never been repealed, it has been suspended since 1816.

Between 1815 and 1852 nothing was done towards keeping up the general militia beyond maintaining an effete permanent staff, but in 1829 an Act was passed for suspending the ballot, and this annual suspension has continued up to the present date. Thus the ballot still remains in reserve for the general or "regular" militia in case of emergency.

In 1852 the *regular militia* in England was reorganized. From having been a force raised by ballot with the subsidiary aid of voluntary enlistment, it now became a force of voluntarily enlisted men, with the ballot in reserve, and on this footing it has remained ever since. It is worthy of note that just before this reorganization the Prime Minister, Lord John Russell, moved a bill for resuscitating the local militia, and proposed a reduction of age; volunteers were to be allowed, but no substitutes admitted in lieu of those chosen by the ballot; service for volunteers was to be three years and for the others four years, and there was to be an annual training.² He hoped to get 70,000 men in the first year, rising to 150,000, and believed that a force thus raised would be less unpopular than the general militia. In the course of the debate Mr. Fox-Maule advocated it as "laying a foundation for the continued increase of the regular army." Lord Palmerston opposed the bill on the ground that he viewed the local militia rather as a reserve for the general militia which did not exist. The bill was rejected and caused the resignation of Lord John Russell. During the debate one member, Col. Chatterton, referred to the advantage of militiamen volunteering for the army, and mentioned how he had seen a whole brigade of Buckinghamshire militia of splendid appearance marching through Bordeaux for Toulouse in 1814.³ Mr. Sidney Herbert also remarked that at Waterloo, out of 18,000 line soldiers the majority were volunteers from the militia.

In 1854 the voluntary system of enlistment was extended to Scotland and Ireland.⁴

The militia of Scotland, which dates from 1797, when provision was made for raising it by ballot, was in 1802 organized similarly to the English. The Irish militia, formed in 1715, then only took Protestants between the ages

¹ Raikes' "First regiment of militia," p. xiii. See also Journal, R.U.S.Inst., vol. 34, p. 748.

² Hansard's Debates, 120, pp. 550, 581, 838, 874. ³ *Ibid.*, p. 1,083.

⁴ Military Law, chap. ix., para. 74.

of 16 and 60, who were liable to appear or find substitutes. The Act of 1793 superseded this, and provided a force—Roman Catholics and Protestants alike—raised by ballot; service was to be for four years, and enlistment in the army was prohibited; when up for training or embodiment it was under the Mutiny Act. Other Acts followed, and that of 1809 consolidated them all, and while providing for ballot and fixing the establishment of each regiment it empowered the lord lieutenant to raise men by voluntary enlistment.¹

At the time of the Irish rebellion, 1796–98, several of the Irish militia regiments proved disaffected. Nevertheless, as an instance of good service performed by a regiment of Irish militia may be quoted the action at Colooney, near Sligo, on September 5th, 1798, where a detachment of the City of Limerick militia with a few yeomanry under Colonel Vereker, some 286 in all, repulsed a force of 900 French under General Humbert, assisted by some Irish sympathizers, and prevented them from reaching Sligo. The check they here experienced led to the speedy surrender of the French invaders to the British force under General Lake.² The losses sustained on either side were, Limerick militia, 81 killed and wounded, and French 58.³

The militia of the United Kingdom is now liable to serve in any part of the United Kingdom, but not out of it, and by the Acts of 1859 and 1875, the Sovereign may accept voluntary offers by the militia to serve in the Channel Islands, Isle of Man, Malta, and Gibraltar; this power was re-enacted in 1882.⁴

The term of service for balloted men now stands at five years, and at a period not exceeding six years for volunteer militiamen, subject to re-enlistment for a period not exceeding six years'. The Act of 1871,⁵ directed that the numbers of the militia should be such as shall from time to time be provided by Parliament, which votes the required sum. It also combined the regular and auxiliary forces in one organization in connection with different territorial districts, the powers of the lords lieutenant were re-vested in the crown and declared to be exercisable through a Secretary of State, and officers of the auxiliary forces were to hold commissions from the Queen in the same manner as officers of the regular forces.⁶

It will thus be seen that there is a general or regular militia, dating from 1852 and raised entirely by voluntary enlistment with the ballot in reserve in case of emergency; and a local militia (the old general levy) created in

¹ Military Law, chap. ix., para. 109.

² In Maxwell's "Irish Rebellion" we read that Lake, in his vigorous pursuit of the French, mounted light infantry behind dragoons with great success. The first French republican colours ever taken by the British troops were captured on this occasion by the Armagh militia. See also *Journal, R.U.S.Inst.*, vol. x., p. 156.

³ A medal was awarded for this action by the Corporation of Limerick, and the regiment received the thanks of Parliament. See Tancred's "Historical Record of Medals," p. 365, and Maxwell's "Irish Rebellion," p. 241.

⁴ Military Law, chap. ix., para. 81 note (g). Similar powers had been granted temporarily in 1813 and 1858. ⁵ Re-enacted in 1882.

⁶ Military Law, chap. ix., para. 87.

1808 and in abeyance since 1815, which may on emergency be raised in each county by ballot. Both general and local militia come under the Army Act, 1881,¹ are to be annually trained, and are liable to be embodied by Royal proclamation.

In 1873 first commissions as officers in the line were given under certain conditions to militia officers, and this system has continued in force up to the present day.²

In 1889, in consequence of a prevailing idea that the militia force was being neglected, Parliament appointed a strong committee under the presidency of Lord Harris, Under Secretary of State for War, to inquire into the system of administration and organization of the militia. In its report the committee stated that between 1854 and 1880 "an immeasurable stride forward had been taken," and that since the latter date not only had there been no retrogression "but that in many directions there had been a material advance." The committee made some practical recommendations most, if not all, of which have since been carried out.

The occasions on which the whole or part of the militia has been embodied since its reorganization, in 1757,³ are as follows :—

- (i) 1756–63, during the Seven Years' war, when it was embodied against invasion.
- (ii) 1778, during the American war, when France entered into a treaty with America; this was also against invasion, and the force remained embodied until 1783.
- (iii) 1792–1802, the time of the Irish rebellion and threatened invasions.
- (iv) 1803, when Napoleon threatened a descent on our coasts, until 1816, after the Waterloo campaign.⁴
- (v) 1854–56, at the time of the Crimean campaign, when the militia contributed many officers and some 30,000 men to the line and did excellent service in garrisoning the United Kingdom and Mediterranean fortresses.
- (vi) 1857–59, during the Indian Mutiny.
- (vii) 1885, at the time of the war in the Sudan (seven months).

As regards the numbers of militiamen embodied at various times :—

In 1801–16, the maximum was 101,450, and minimum 70,650.

In 1856 there were 68,851 embodied.

In 1857 „ 32,460 „

The local militia was called out between 1809 and 1816, the strength varying from 240,000 in 1809, to 80,000 in 1816.

2. *Present Constitution of the Militia.*

The militia is governed by the "militia regulations" which are approved by royal warrant. These are revised

¹ Military Law, chap. ix., para. 104, note (c).

² A few commissions are similarly given annually in the Royal Artillery.

³ Clode, vol. i., p. 48.

⁴ Ann. Reg., 1803, p. 646; 55 Geo. III., c. 77. See also "Comparative statement of the military forces, &c., of the British Empire," 1801–1866, published by the Topographical Department, War Office.

from time to time and contain all the regulations concerning the organization, discipline, pay, equipment, clothing, barracks, &c., of the force. The militia in the United Kingdom is divided into infantry, artillery, engineers, and medical staff corps, and, under the territorial system, the whole is affiliated to the corresponding branches of the regular army.

The administration of the militia at headquarters has followed suit. Until the year 1876, it was conducted by special officers, but since that date it has been administered by the same staff as the regular army. A staff officer of high rank called the Deputy Adjutant-General for militia, yeomanry, and volunteers, watches over the interests of the force and directs it generally.

There are in all 128 infantry battalions, which form additional battalions to the regular regiments of the line, 32 corps of artillery, 11 fortress companies of engineers, 8 divisions of submarine miners, and 1 company medical staff corps. There is no militia cavalry.

In addition to the militia force in the United Kingdom there is the Royal Malta regiment of militia, some Colonial corps of militia, and the militia of the Channel Islands consisting of 3 artillery regiments and 6 regiments of light infantry.¹

The Channel Islands militia force is raised and governed under the "Militia Law, 1881."² Service is compulsory, regiments being recruited by districts, in each of which a "*régistre du district*" is kept, containing the names of all men in that district liable to service. Exemptions are recognized, but all men between the ages of 16 and 59 must appear under one or other of the following classifications: (i), effectives and recruits; (ii) 1st reserve, fit; (iii) 1st reserve, unfit; (iv) 2nd reserve, fit; (v) 2nd reserve, unfit. Boys and recruits have to undergo a fixed number of compulsory drills, and are inspected before they can be brought on to the active lists of their regiments; they must also have attained the age of 20, or, in special cases, of 18. The annual training lasts for nine days, and there is in addition an annual musketry course. Similar arrangements apply to the artillery. The permanent staff is analogous to that for the militia of the United Kingdom.

¹ The established strength of the Malta Militia is 1,130; there is also a small body of 60 militia submarine miners in Malta. The Channel Islands Militia numbers 1,093 artillery and 2,898 infantry.

² There is a Militia Law for each island. See "Regulations for the Channel Islands Militia," dated April 1, 1890.

The 1st reserve contains men who have been transferred from the active list up to the age of 45 and the second reserve comprises all those between the ages of 45 and 60.

3. *Quartering and Training.*

In consequence of the reorganization of the militia, resulting from the introduction of the territorial system in 1872, the old quarters provided by the counties for the accommodation of the permanent staff, and for the arms, equipment, and clothing of militia corps were mostly parted with, and quarters were provided in the new *depôt* barracks at the headquarters of regimental districts. A few of the old county barracks remain, as at Macclesfield, Hereford, &c. The new system however still failed to properly accommodate the men during training. In former times they used to be billeted in public houses, but these places were detrimental to discipline besides being unpopular, and are now almost entirely abandoned; in a few cases, lodgings are provided by regimental arrangements in lieu of billets.¹

The intention of the localization committee of 1872 was that the battalions of militia should during training be placed under canvas or otherwise at the headquarters of regimental districts, but at the same time, to avoid annually placing men in tents in possibly inclement weather, an endeavour was made to provide, in some cases, training barracks, which in winter should be occupied by the line, and during training by the militia. Neither system was completely carried out. The training at headquarters under canvas is done at some 45 places, of which Worcester and Lancaster are examples. Of training barracks, there are 3: Lichfield, York, and Warley.

The *training* of militia battalions is now carried out under one or other of four systems, and lasts 21 to 28 days:—

¹ In 1892 were trained in lodgings, 4 corps; partly in lodgings, 4; in billets, 1; and partly in billets, 3. For lodgings the adjutant makes the arrangements and pays; fourpence a day per man is allowed as billet-money.

(a) Under canvas at the headquarters¹ of regimental districts, or in training barracks. In this way the militia battalion occupies the same ground year by year, is associated with its own regimental depôt, is under the eye of its own inspecting officer, the colonel of the regimental district, and the plan works well, especially when the station is well situated.

(b) Some locality more or less popular with officers and men is selected, the battalion is encamped there by itself and usually without any military surroundings.

(c) The battalion is sent to a camp, or is lodged in vacant huts or barracks at some station, and finds itself side by side with other militia battalions or with regular troops, or with both. As examples of this may be cited Altcar, Shorncliffe and Chipping or Fleetwood.

(d) In camp (or huts, as at Aldershot) with the other units of the militia brigade to which the unit concerned is detailed for home defence. This method was introduced for the first time in 1892, and it presents obvious advantages.

The militia artillery has likewise been sent from time to time to train at the fortresses to which it is told off for defence, and is there taught its proper duties. The militia medical staff corps is trained at the army medical staff corps depôt at Aldershot.

In reviewing the above, it is manifest that in a military sense some of the systems present much greater advantages than others, particularly with regard to the instruction of officers and soldiers in field duties. Hitherto it has been the aim of the authorities when determining which system of training shall be adopted, to try and combine, as far as possible, the two important *desiderata* of popularity and military efficiency, and not unfrequently the latter has had to give way to the former. Efficiency must of necessity be considered, and, under a voluntary system like ours so must popularity, but it is extremely doubtful whether both these ends cannot be attained, in a much greater degree than has heretofore been sometimes thought possible, by attending more exclusively to efficiency in its best sense.

In this country efficiency in any craft, and the esteem of the public which gives popularity, go hand in hand. In the metropolis the volunteers would not enjoy the popularity which they do were they not proverbially efficient and up to date. A man enlists because he wants to be a soldier and, it may be presumed, a good and effective one, and not a

¹ In 1892, about 60 corps trained at headquarters.

slovenly or old-fashioned specimen! Therefore all may take courage and believe that anything which will make the militia still more smart, active, and efficient soldiers, up to the standard of the present age, will also tend to the true popularity of that much valued branch of the service.

4. *Drill of Recruits and Musketry.*

Prior to 1872 the recruits of the year were all brought up about two months before the training, and were drilled together. This assemblage was called preliminary drill and, no doubt, it afforded a valuable opportunity for getting the staff and some of the non-commissioned officers and men together in a sort of preparatory school before the whole body came together for training. After 1872 drill for recruits on enlistment became the rule. If however men enough present themselves, preliminary drill before training is still permitted. The two plans thus co-exist, but this drill before training is now less resorted to than formerly. The regulations permit a certain number of trained men, not exceeding 25 per cent. of the recruits assembled, to be called up with the recruits to assist them by taking guards, and performing other duties such as cooks, tailors, &c., and so relieve the recruits of these duties. The Militia Act, 1882, provides for any militia officer or militiaman being called up with his own consent for the purpose of instruction.²

One advantage gained by the preliminary drill is still retained in a modified degree, but under some difficulty and discouragement—viz., the better training and instruction of the militia non-commissioned officers. Now that in the regular army non-commissioned officers must undergo before promotion an examination as to their professional qualifications, an incentive is offered to the militia to do the same. Much depends upon the opinion of the officers as to what

¹ The number of officers called up to attend preliminary drill depends upon the number of recruits attending the drill. The proportions allowed are given in the Militia Regulations, part i., sect. iv.

² Militia Act, 1882, part iii., sect. 15, and "Militia Regulations," sect. 155.

constitutes "professional qualification," and it has been too usual to be content with a low standard. With the increased importance attached to the duties of section commanders, militia non-commissioned officers have more than ever something to work for, and special schools of training for their benefit are deserving of support, but the corps themselves must first do the best they can with the means at their disposal. This subject is of much importance from the point of view of discipline, for the militia non-commissioned officer may occasionally chance to be the social inferior of the man he commands, and it is only by superior efficiency that he can acquire influence, and something better than the mere legal claim to have his authority respected.¹

Musketry.—Owing to the shortness of the period of training, this important subject is one to which it is often not easy to do proper justice. The question has attracted a great deal of attention, and though many opinions have been expressed by officers in every way qualified it is doubtful whether a satisfactory solution has as yet been arrived at.²

What obtains at the present day is briefly as follows:—Each infantry and engineer unit has an instructor, and occasionally an assistant instructor, in musketry. Every recruit officer and militiaman has to undergo during his recruit drill and training the course laid down in Table A of the "Musketry Regulations,"³ and every militiaman is annually exercised in the course laid down in Table B of the above. Two or more companies are struck off duty for musketry at the commencement of the training and go through their preliminary drills and target practice. The company obtaining the best "figure of merit" is announced annually and money prizes are granted for good shooting. With artillery units similar arrangements for gunnery instruction are observed. Officers are allowed to attend the courses of instruction at Hythe and Woolwich. The report of the commandant of the School of Musketry, Hythe, for 1891, states that 124 battalions were exercised in that year, "with, on the whole, satisfactory results." The shooting of 12 was described as very satisfactory, 56 as satisfactory, 42 as moderate, 8 as indifferent, and 8 as bad. The total number of men exercised was 63,796, and 4 per cent. of the whole force were not exercised.⁴ Of recruits, 24½ per

¹ For schools of instruction, see chap. xxv.

² See Journal R.U.S.Inst., vol. xxv. Lecture by Col. Innes, p. 123.

³ These do not apply to artillery militia. See "Militia Regulations," part. i., sect. 4.

⁴ After deducting those exempt by regulations, there remain only 1·51 per cent. not exercised.

cont. passed the first class, 37 per cent. the second, and 38½ per cent. the third.

5. *Permanent Staff. Establishment and Enrolled Strength. Bounties and Pay.*

In order to ensure that the militia (as well as the yeomanry and volunteers) shall have the advantage of properly qualified instruction from the regular army, each unit has attached to it a permanent establishment called the "permanent staff," consisting, as a rule, of an adjutant, a quartermaster, and a certain number of non-commissioned officers and drummers, all supplied from the corresponding arm of the regular army, and in the case of infantry by preference from the territorial regiment to which the militia unit belongs. Under certain conditions pensioners may be enlisted to fill these positions. The establishment of permanent staff for a militia battalion of a territorial regiment is normally 1 adjutant, 1 quartermaster, 1 sergeant-major (militia), 1 quartermaster-sergeant, 1 sergeant-instructor of musketry, one colour-sergeant, sergeant, and drummer per company, 1 sergeant drummer. Total, some 30 to 36 according to the size of the battalion.

For artillery and engineers the same rule applies. The permanent staff are borne as supernumeraries on the strength of the regiment or corps of the regular army to which they belong.¹

Each militia unit has a certain fixed *establishment* of officers, non-commissioned officers, and men, payment for whom is estimated for annually. This established strength is laid down in the annual list of regimental establishments of the regular forces, militia, yeomanry, and volunteers.² The strength of an infantry militia battalion of 8 companies may be said to be 23 militia officers, 48 non-commissioned officers, and 800 privates. Total, exclusive of the permanent staff, 871 of all ranks.

The "enrolled strength" is the technical term which denotes the actual strength of a unit, and includes those present at training and absent with and without leave, i.e., the actual number of officers and men who are borne on the books. In 1892 it amounted in the whole of the militia of the United Kingdom to 116,352 of all ranks, the establishment being 134,629. Thus the militia force on that date was 18,277 men short of the establishment.³

A *recruit* enlisted for a militia unit receives no bounty on enlistment, but receives a bounty varying from £1 to £1 10s. on dismissal to his home from recruit drill, preliminary drill, and training, under certain rules which are laid down. A *militiaman* receives an annual bounty of £1 on the expiration of his annual training, under certain restrictions. Every sergeant of militia who has joined on discharge from the army as a non-commissioned officer receives an annual bounty of £3 on the expiration of each training. This is

¹ The permanent staff do duty during the non-training period with the depôt, thus enabling the service there to be more economically provided for, but it is obvious that an effective means for replacing them on mobilization is requisite.

² Those for 1892-93 were issued with A.O. of 14 July, 1892.

³ Preliminary annual return of the British Army for 1892.

intended to stimulate non-commissioned officers of the regular forces to join the militia as sergeants.

Every militiaman on re-engagement receives a bounty of £1 10s. and an annual bounty of £1 10s. on expiration of training. Men who enlist for the militia after discharge from the regular army, army reserve, navy, or marines receive a bounty of £1 10s. A militiaman enlisted or re-enlisted for the militia reserve receives a bounty of £1 in advance for each year of service in the militia. A militiaman who, when up for drill on enlistment, preliminary drill or training, enlists into the regular army, receives a bounty of £1.¹

The pay of militia officers and men when they are called out for drill on enlistment, preliminary drill, training, or exercise is the same as that given to the various ranks of the arm of the regular army corresponding to that of the militia unit.

6. *Supply of Officers and Men.*

The conditions affecting the supply of officers for the militia are dealt with in Chapter XVIII. Both subalterns and captains have to pass certain tests for promotion. Encouragement is given to officers of the regular army to take commissions in the militia, in order to have the advantage of the services of trained officers in the militia battalions. Thus a captain of the regular army may retire from the latter and obtain a commission in the militia, and for a period not exceeding ten years he will be allowed retired pay equal to half-pay in addition to his militia pay. He cannot, however, return to the regular forces.

Also (as is shown in Chapter XVIII) the militia has been made a stepping-stone for admission to first appointments in the regular army. By this means a flow of subaltern officers is ensured to militia battalions, for, though many of these officers leave, on appointment to the regular army, their places are taken by others. The objection to this course is that many young gentlemen join the militia solely for the purpose of leaving it after two trainings, and thus they do not give the regiment the advantage of what they have learnt, and they do not, perhaps, take much interest in the militia work and in the men; but, on the whole, the advantages may be said to outweigh the disadvantages.

The commanding officer is, as a rule, appointed for five years.² Medical officers will henceforth be found by the Army Medical Department when required.³ The adjutant is taken from the regular army, and holds the appointment for five years, preference being rightly given to officers belonging to the same territorial regiment as the militia battalion concerned. The quartermaster is appointed from quartermasters, warrant officers, or non-commissioned officers of the arm of the regular army to which the militia unit belongs. Non-commissioned officers of infantry militia battalions serving on their army engagements are also eligible.

An officer of militia may be seconded for any period up to five years if

¹ Militia Regulations, 1891, part ii., div. ii.

² *Ibid.*, sect. 45.

³ See also p. 273.

employed abroad with regular forces, or in any special appointment approved by the Secretary of State. Transfers and exchanges are permitted in the militia and between the militia and volunteers. Subject to certain qualifications, officers above the rank of lieutenant may be granted honorary rank when serving.

Since 1877 the officers of the militia have been permanently subject to military law; the non-commissioned officers (permanent staff excluded) and men are so subject only when called out for embodiment or training.

Supply of Men. (a) Recruits.—The recruit is enlisted for six years, and for the county in which he is raised. A militiaman, if under the age of 45, may re-engage for a further period of four years, and may be re-enlisted for a period of four years, up to the age of 45. He may not be transferred to the militia of another territorial regiment without his consent, but an infantry militiaman may be removed, if required, to any other militia battalion of the territorial regiment to which he belongs.

(b) Discharges.—On termination of engagement by purchase, on conviction of felony, and as invalids, the discharge of militiamen may be carried out by officers commanding a militia unit without reference to higher authority. Discharges for misconduct (other than felony) must be referred to the general officer commanding the district.

(c) Enlistment into other Forces.—If a militiaman wishes to enlist in the army or navy during the period of his training, he obtains from his commanding officer a "conditional discharge," pending his being released from his engagement. When not up for training or drill, a militiaman wishing to enlist into the army or navy can be attested at once.

7. *Embodiment. Militia Reserve. Arms, Equipment, and Inspection.*

Under the territorial system, the intention as regards the militia in war time is that both militia battalions of a territorial regiment which has two line battalions abroad would be embodied, and one in the case of a regiment having one line battalion abroad. The mode in which the militia battalions would feed the line battalions has been mentioned in Chapter VII., p. 118.

The *Militia Reserve* is a force, instituted in 1867, enlisted from the militia of the United Kingdom, either for six years or for the residue of the man's militia engagement.¹ Of this a part forms a reserve for the medical staff corps. A man in the militia reserve is liable to be called out for an annual training not exceeding 56 days with either regular or auxiliary forces, in substitution for the ordinary militia annual training. He may be called out by Royal proclamation, and then becomes for all purposes a soldier in the regular forces, and can be appointed to any corps. He is not liable to serve beyond the unexpired term of his service in the militia reserve, except under certain eventualities when he can be detained for one year longer. Until called out for permanent service he remains for all purposes a militiaman.²

¹ Military Law, chap. xi., p. 276.

² Out of the 32,000 reserve men called up in 1878, 20,000 were militia reserve.

On 1st January, 1892, the total strength of the militia reserve was 30,170.

The *Arms and Equipment* of the force may be said to be generally analogous to those of the regular army. Militia bands are kept up by the regiments themselves. On joining, a militiaman is given a limited kit, which has to last him six years, at the end of which period it becomes his own property, but he is allowed to take away one pair of boots, also shirts and socks at the end of each year.¹

The *Inspection* of militia artillery and the infantry battalions is annually undertaken by the officer commanding the militia and volunteer artillery of the district, and by the colonel commanding the regimental district respectively.

If the training is conducted at a large tactical station the battalion is inspected by, or under the orders of, the general officer commanding.² And generally where the militia unit trains at a distance from its headquarters the actual inspection may be conducted under local arrangements.

8. *Summary.*

To sum up in a few words:—

In 1871 the command of the militia having been transferred from the lord lieutenants of counties to the Crown, by the "Regulation of the Forces Act," the force benefited considerably from being brought directly under the military authorities. Then followed the incorporation of the militia into the territorial system, which gave it a more intimate association with the regular army and an improved permanent staff. Schools of instruction for officers, camps of exercise, participation in field manoeuvres, a greater leaven of officers from the regular army, and the attention of general officers commanding and officers commanding regimental districts, have further tended to greatly improve the force, and to make it what it is, the second line of defence. Though much is still wanted before the militia can be considered as a fully organized force, still it must be allowed that its progress in recent years has been rapid.

¹ For clothing, see Militia Regulations.

² Q.R., sect. xviii., paras. 4 and 42.

CHAPTER XXIII. *Regiment*

YEOMANRY AND VOLUNTEERS.

YEOMANRY.

THE Yeomanry is a volunteer cavalry force, liable in case of invasion or rebellion, or insurrection arising out of invasion, to be assembled in any part of Great Britain until a royal proclamation declares the enemy to be defeated and expelled, or the rebellion suppressed. It may also be assembled voluntarily for improvement in military exercises and for the suppression of riots. This duty must not be confounded with the ordinary duty which the yeomanry discharge in common with other of the Queen's subjects on the call of and to aid the civil magistrate.¹

The yeomen are largely obtained, though probably less now than formerly, from the agricultural class, many of them belonging to the families of tenant farmers and others living in the country and county towns. They are men accustomed to horses, hunting, and outdoor work, and it is clear that a force composed of men of this class, possessing a thorough knowledge of and habituated to the life of their own country, cannot fail to be of value if properly disciplined and led. The unfortunate agricultural depression which has obtained in recent years has without doubt seriously affected this class of the community and the tendency has been towards a diminution in the numbers of the yeomanry cavalry, but nevertheless, in accordance with their means the farmers have continued to give it their loyal support. The force also owes much to the spirit and active habits of the large and increasing body of fly proprietors, hotel and livery-stable keepers and others keeping horses for their business, who give personal service.

¹ Clode, vol. i., p. 320; vol. ii., p. 139, also *Military Law*, p. 283.

1. *History and development.*

The yeomanry is the remnant of the large volunteer force formed in the end of the last and the early part of the present century when invasion was imminent. It was first enrolled by Lord Chatham in 1761, and reorganized on the system of the volunteers of that period in 1793. It has done excellent service on many occasions, notably in 1798, in the defeat of the French by General Lake. In 1807, when all danger of further trouble in Ireland was over, the Irish Yeomanry was disbanded, having called forth the eulogium of the Duke of Wellington. In England the services of the yeomanry continued in constant requisition, its strength at one time reaching 40,000; and, in the absence of a police force, it was frequently employed in putting down riot, and on more than one occasion received the thanks of parliament.¹

During the great lull in military activity which set in after the peace of 1815, the numbers of the yeomanry dwindled, but in recent years the interest in the force has revived considerably, and with the appointment of adjutants and non-commissioned officers from the regular army, and the establishment of a school of instruction at Aldershot, there is every hope of its gaining rather than losing ground. Considerable impetus was given by the recommendations of a special committee which sat in 1875 under the presidency of Colonel the Hon. F. A. Stanley. The more important of those which were carried out were the continuance of the regimental light cavalry organization, the abolition of artillery,² a minimum establishment laid down for a regiment at 200 men, officers required to obtain certificates from the school of instruction, hiring of horses forbidden, and inspections to be conducted annually by officers specially appointed for the purpose.

In 1888 an Act was passed enacting that every corps of yeomanry shall be liable to be called out for actual military service in any part of Great Britain.

In 1892 a War Office committee under the presidency of Lord Brownlow, Parliamentary Under-Secretary of State, reconsidered the question of the yeomanry force "with the view of making recommendations as to the amalgamation of corps and other desirable reforms." It appears that hitherto, owing to the organization of the force in detached troops, each regiment forming a separate command, it had been found impossible to find any means of bringing the yeomanry satisfactorily into any scheme for home defence. A force of an established strength of some 14,000 men scattered over the country and costing a considerable sum, without its services

¹ *Journal R.U.S.Inst.*, vol. xxvii; pp. 329, 330.

² Some regiments used to have guns attached to them.

being available with the rest of the forces for home defence, obviously needed reform.

The Committee recognized the fact that the existing organization was not "satisfactory, either from a peace or a war point of view."¹ Considering the number of efficient, the permanent staff was excessive, the organization was unsuitable for home defence, and no encouragement was given to improve shooting. They, therefore, recommended amongst other things to introduce the squadron system into the force, thereby giving "to the yeomanry in peace an organization which would not be changed on mobilization," and enabling the auxiliary cavalry to "as far as possible work on the same lines as the regular cavalry." Regiments would consist of two, three, or four squadrons and be brigaded on a system which, while preserving the individuality of regiments, will group them in formations suitable for mobilization purposes.² The committee recommended that a moderate musketry qualification should be made an essential, and that a day's pay be given to every man who has passed the course.

2. *Constitution, Organization, Establishment, &c.*

The present yeomanry force is raised and serves under the Act of 1804, and is governed by the "Regulations for Yeomanry Cavalry." It is liable to be called out for active military service in case of invasion actual or threatened, and may be assembled in aid of the civil power, and for escorting the Sovereign. In respect of its permanent staff and organization the yeomanry is under the military authorities of its district; when assembled or doing duty it is under the general of the district in which it may be employed at the time.

By Army Orders of 1st January, 1893, a new organization in brigades was introduced, the inspection of brigades by the general officers commanding districts was instituted, whilst at the same time a technical inspection was provided for by the Inspector-General of Cavalry or an officer deputed by him.

(a). *Organization*.—The yeomanry regiments are organized by squadrons, the maximum establishment of which is 100, and the minimum 70 efficient. After 1st April, 1895, any squadron not producing 70 efficient members will be liable to be broken up. Two, or sometimes three, regiments are associated

¹ Report of Lord Brownlow's Committee on the Yeomanry, March, 1892.

² *Ibid.*, app. ii.

to form twenty brigades, each of which has a place allotted to it on mobilization. Seventeen of the brigades are numbered one to seventeen, and three, viz., the Portsmouth, Devon, and Kent brigades bear no numbers. There is also one separate corps of two squadrons. The total number of squadrons is 109 with an establishment of 10,900 exclusive of officers, permanent staff, and sergeant-majors. There is one adjutant per brigade, instead of one per regiment as formerly, with authority in certain cases to have an assistant adjutant.

In 1891 the total enrolled strength was 9,869, and the efficient strength 8,471 out of an established strength for that year of 13,067 yeomen.

(b). *Permanent staff*.—For a regiment one non-commissioned officer is allowed for general duties and one for each squadron. These non-commissioned officers are taken from the regular army and may serve on their army engagements or not.

(c). *Rules*.—Each regiment is required to have a set of rules drawn up and approved by the Sovereign through the Secretary of State for War. These rules lay down a scale of fines which in the yeomanry take the place of punishment for minor breaches of discipline and order. The fines when collected are credited to the regimental funds for the benefit of the regiment. Serious offences are dealt with by expulsion.

(d). *"Exercise" and "permanent duty."*¹—For training purposes yeomanry regiments may be assembled: (1) voluntarily for exercise and (2) obligatorily for permanent duty and inspection.

For "exercise" regiments may with special permission be assembled for a period not exceeding fourteen days in the year (not necessarily consecutive).

For "permanent duty" yeomanry cavalry assemble for six successive days in the year. The details are arranged by the general officers commanding districts in consultation with commanding officers in order to ensure the presence of the brigade adjutant with each regiment.

Regiments forming a brigade are required to train together in brigade at least once in every three years. The senior regimental commanding officer will command the brigade, and all questions affecting the action or administration of the regiments as a brigade will be referred to him. But under special circumstances an officer of the regular army may be detailed to command a brigade. A musketry course is obligatory. Before yeomen are assembled for duty they must have gone through at least six squad drills, mounted and dismounted, and five squadron drills mounted. Recruits go through twelve drills and a modified musketry course. These qualifications constitute an "efficient."

(e). *Pay, finance, &c.*—The regiment draws pay for each non-commissioned officer and man at the rate of seven shillings a day when on permanent duty, at a lesser rate when at "troop drills," and a lesser rate again when at exercise; there are also certain minor allowances.²

¹ Permanent duty is the term applied to the annual obligatory training here described.

² See Yeomanry Regulations, 1889, amended by Army Order 22 of 1893.

For each efficient the regiment draws a contingent allowance of £2, a further sum of £1 being given for two years for each yeoman who in addition to being an efficient has passed out of the third class in the trained yeoman's or recruit's musketry course. The pay authorized by regulation goes into the pockets of the yeomen, and the allowance granted for contingent purposes goes into the contingent fund which is expended under the responsibility of the commanding officer for expenses of orderly room, drill ground and riding school, stores, postage, clothing, accoutrements and saddlery, ranges, hire of horses for the permanent staff, &c.¹

In some corps the contingent fund is not able to bear all the expense of the yeoman's clothing and he is, therefore, called on to supply certain articles at his own expense.

(f). *Provision of horses.*—Every non-commissioned officer and private must ride his own horse, or borrow one, and is required to satisfy the commanding officer that the horse is available whenever wanted. Horses may be hired for the permanent staff and band.

(g). *Supply of officers.*²—The officers of the yeomanry are, as a rule, drawn from the county families of the neighbourhood to which the corps belongs, many of them being ex-officers of the regular army. They know intimately the men of their squadron and are looked up to and respected by them. The *esprit de corps* and discipline of the regiments are proverbially good, and this is an important factor in the value of the force.

The yeomanry is subject to military law when being trained and exercised alone, thus differing from volunteers.³

Equipment.—The force is armed with Martini carbines and swords which, as well as a few pistols, are supplied by government.

Inspection.—Yeomanry regiments are inspected by, or under arrangements made by, the general officer commanding the district to which they belong. Periodically a technical inspection will be made by the inspector-general of cavalry, or an officer deputed by him.

Schools of Instruction.—There is at Aldershot a special school of instruction for yeomanry and volunteer cavalry. It is under the charge of an officer of the regular cavalry with a staff of non-commissioned officers. Further particulars will be found in Chapter XXV.

Field officers and captains (who have not attended as subalterns) may attend the school for a two months' course, and subalterns are now ordered to attend for a month and may attend for a second month. Certificates of proficiency are issued and certain allowances are granted. Sergeants of the permanent staff have to attend a course periodically. Officers may at their own expense be attached to cavalry regiments for further instruction.

The training obtained in the school of instruction is very valuable and is bearing good fruit.

There has at different times been much discussion both in public and in military periodical journals as to the rôle

¹ Yeomanry Regulations, sect. 244.

² See chap. xviii for first appointments to the Yeomanry.

³ Military Law, chap. xi., p. 283.

which should be played by the yeomanry. Many well-qualified officers have expressed the view that the force should be organized on the principle of a mounted rifle corps rather than as cavalry. One well-known yeomanry officer lecturing before the R.U.S. Institution¹ in 1883 strongly advocated this course, while at the same time deprecating that the yeomanry should become mounted infantry. But in the ensuing discussion General Sir E. Hamley, and Colonel Mussenden, inspecting officer for auxiliary cavalry, though expressing their high opinion of the force, clearly stated that according to their view of the matter "there is no medium between cavalry and mounted infantry, and that any attempt to produce a force between the two would only be to muddle and spoil both."

It is, therefore, well to make it quite clear that the yeomanry are being trained essentially as cavalry and not as mounted rifles or anything else.

Begin again

THE VOLUNTEER FORCE.

1. *History.*

The volunteer force now existing in Great Britain owes its origin to a wave of patriotic feeling which swept through the country in the years 1858-9. It is true that a few isolated corps were formed as early as 1852, but these seem scarcely to have been backed up by either public enthusiasm or official encouragement. The real birth of the force is marked by the letter dated May 12th, 1859, addressed by the Queen in Council to the Lieutenants of Counties (commonly called Lords Lieutenant) sanctioning the formation of volunteer organized bodies of different arms, and reciting the chief provisions of the then unrepealed Act of George III. (44 George III., cap. 54), under which as many as 463,000² volunteers had been raised during the great

¹ *Journal, R.U.S. Inst.*, vol. xxvii., pp. 329-355.

² Clode, vol. i., p. 318. Return of Volunteers for Great Britain and Ireland. December, 1803.

French war. This wave of patriotic feeling undoubtedly arose from a fear of invasion by the French, caused by the "intemperate boasts and menaces of French officers and journalists" directed against England in consequence of the shelter which the conspirator Orsini had found for his confederates in this country when the plot, which was attempted to be put in execution in January 1858, was being hatched against the life of the Emperor Napoleon, and indirectly occasioned the overthrow of the Palmerston government.

The successes of the French in North Italy, in 1859, and the cession of Savoy and Nice to them in 1860, gave, in England, fresh impetus to the volunteer movement, and the force speedily rose from 70,000 to 180,000 men.¹

Although there seems to have been at this time a general feeling of unreasoned alarm almost akin to panic, it is remarkable that the outcome of the excitement should have been the establishment of a permanent and not merely of a temporary defensive force. Subsequent events justified the action of the executive, both parties in the state encouraging the movement. From the first the judicious policy of giving assistance in proportion to efficiency was adopted by the War Office; and it is probably to this as much as to any other cause that the system has developed lasting qualities.

The course which the development of the new institution took is not without interest. The first stage was the formation of small detached corps in towns and country districts; the second the grouping of these corps into administrative battalions, so-called; while the third and last was the incorporation of these as constituent parts (volunteer battalions) of territorial regiments. *Pari passu* with the above, the higher administration of the volunteers, at first confided to a special staff, was made over to those departments of the War Office which deal with the corresponding branches of the regulars; a change which marked a more complete identification of the volunteers with the rest of the army.

¹ Fyffe's *Modern Europe*, vol. III., p. 479.

The year 1859 is notable for two important debates in both Houses of Parliament, which were remarkable for the unanimity with which men of all parties supported the movement, although its future was as yet doubtful. It is worth while, in view of the existing state of the force, to quote a sentence from Mr. Sidney Herbert's speech of the 1st of July. He said:—

"The existence of the militia has spread a military feeling and imported military knowledge to gentlemen of influence in their respective localities. What we want now is to get the middle classes imbued with an interest in our means of defence, and I think that the volunteer corps will be useful in doing that."

No exaggerated view was held by the war minister of what volunteers could achieve. It was sufficient to utilize the ardent feeling of the nation to create a defensive force of ordinary citizens of the middle class, and to leave that force to work out its own development by constantly aiming at higher military efficiency, by a gradual tightening of the bonds of discipline, and by a closer drawing of the links which attach it to the regular army.

The same year is further remarkable for the establishment of the National Rifle Association in connection with the volunteer force, the first meeting being held at Wimbledon in July 1860. The association has since then fulfilled the objects for which it was founded, namely, "the promotion and encouragement of rifle shooting throughout the Queen's dominions and to give permanence to the volunteer force."¹

2. *Constitution and Organization.*

The volunteer force is constituted under three Acts of Parliament (dated respectively 21st July, 1863, 9th August, 1869, and 17th August, 1871), under regulations made from time to time by the Secretary of State for War by authority of these Acts, and it serves, in defined circumstances, under the Army Act in force for the time being. The Act of 1863 repeals every Volunteer Act up to that date. For complete information on this subject reference must be made to the "Volunteer Regulations," which volume contains a fairly complete recitation of the Acts referred to. This book is to the volunteers what the Queen's Regulations and the Army Act are to the regular

¹ See Chap. XXV.

army, except that many provisions of the Queen's Regulations apply also to the volunteers, and that when acting with regular troops, or when called out for active service, they are at once placed under the Army Act.

The elements composing the volunteer force are as follows:—

Light horse, artillery, engineers (including submarine miners), mounted infantry, cyclist infantry, and infantry. There is also a volunteer railway staff corps and a volunteer medical staff corps.

The light horse have not shown signs of great vitality, probably owing to the fact that they cannot compete, as a rule, in attractiveness with the yeomanry cavalry; their numbers in 1892 were 250 enrolled out of an establishment of 364. On the other hand, there has been a large increase in the numbers of mounted infantry and cyclist infantry, which now consist of 530 and 2,218 respectively. With the exception of the cyclist corps (the 26th Middlesex) these latter troops are attached to infantry battalions, and form part of their ordinary organization. It seems probable that cyclists have not yet attained their full development.

The artillery has at present an enrolled strength of 41,415 out of an establishment of 48,117; it is divided into garrison and position artillery. The garrison artillery are trained to the use of the guns in the particular forts to which they are assigned by the district defence schemes. The position artillery is armed with 40-pr. R.B.L. guns and 16-pr. R.M.L. guns.

The engineers (fortress and railway) have a total enrolled strength of 11,722, while the submarine miners amount to 1,358. Some of the latter have recently been converted into militia.

The total enrolled strength of the volunteer infantry is 169,245 out of an establishment of 197,391. It is organized in battalions and brigades, and is armed with Martini-Henry rifles. In country districts it is sometimes necessary to maintain a separate headquarters establishment for each company, with a paid staff sergeant attached. In towns one headquarters establishment for each battalion is sufficient, with paid staff sergeants in proportion to its strength, under the direct control of the adjutant. The battalions are grouped by localities into 83 brigades under the command of permanently appointed brigadiers. This organization has probably not as yet reached finality.

The railway volunteer staff corps, consisting of officers only, numbers 32, but as these 32 are all men accustomed to the organization and management of the traffic on our great lines of railway, and to other great engineering operations in connection with railways; and as they have in their daily work the most highly-trained staffs that it is possible to conceive, this *cadre* in reality represents a probably unequalled organization for moving troops. Even volunteers do not usually realize that the railway manager, whose name he sees at the top of a page in "Bradshaw" is probably a volunteer lieutenant-colonel, and that all the problems of concentration suggested by the War Office have been worked out in detail by the railway volunteer staff corps.¹

The volunteer medical staff corps has at present 1,488 enrolled members,

¹ See a lecture on this subject by the late Lieut.-Col. Sir George Findlay, *Journal of the R.U.S.Inst.*, vol. xxxiv., p. 895.

all of whom have added the necessary military training to their previous medical and surgical knowledge. The organization is at present incomplete for field work, but is being improved.

The infantry possess 19 machine guns of rifle calibre. In but few (if any) instances however is there attached to these either a proper system of ammunition supply, or arrangements for traction other than by hand.

3. *Training.—Drill and Musketry.*

The minimum number of drills which each volunteer must attend, and the standard of musketry which he must attain, are laid down in full detail for the different arms in the appendix to the volunteer regulations. Broadly speaking, a private must attend sixty drills during his first two years, each of at least one hour's duration; and in subsequent years nine drills, three of which must be battalion drills. In addition to this he must pass a standard of musketry about equivalent practically to hitting a 6 × 4 feet target about fifteen times out of twenty shots, at ranges from 100 to 300 yards. It must be admitted that the standard in both cases is low. But it must also be recollected that in most volunteer corps the large majority of the men go far beyond the compulsory requirements of government, both in shooting and attendance at drill.

The course of drill training varies with the local circumstances of each corps, and no facts applying to all equally can be given. Brigade camps have recently increased in numbers, and in the case of country corps their value is specially great. But at best only a comparatively small proportion of men can attend them on the average. Where corps are located in towns the advantage of brigade camps consists as much in creating soldierly habits in camp life under strict military discipline, as in the actual teaching of drill or manœuvre in large bodies, for which they have more opportunity than country corps.

The great blot on the present system of training is the fact that it is impossible to ensure that all trained volunteers shall go through, even once a year, the movements and practices absolutely necessary to make them

handy and efficient soldiers. There does not seem to be any possibility of seriously increasing the compulsory requirements of the training of privates under the present constitution of the force. How much then depends on the quality of the instruction conveyed when the men are present, how much on the vigilant efficiency of commanding officers, and how much, particularly in the instruction of recruits, on the maintenance of the highest, most recent, and up-to-date standard of efficiency in the staff sergeant-instructors, whose work should be closely scrutinized by inspecting officers on every opportunity.

Non-commissioned officers, before they obtain promotion, are obliged to pass an examination in their future duties. The strictness of this examination naturally depends upon the character of the adjutant who examines, as well as on the ordinary law of supply and demand. Volunteer sergeants, however, are usually deserving of great praise. Their work is hard as compared with that of the rank and file, and it is carried out with energy and conscientiousness. They have not as a rule the authoritative habits of regular sergeants, simply because they are but rarely put in positions of authority. This however is an evil which would soon be cured under stress of circumstances. The importance attached to section commands in the 1893 drill book should produce a marked effect in this direction.

Subaltern officers have to pass a technical examination, within two years from the receipt of their commissions, in the duties entailed by their commands, and field officers also have to pass more advanced examinations before or after promotion. These examinations may be carried out in three ways, (1) by a board appointed for the purpose in any district, (2) by the candidate being attached to a regular battalion for instruction, (3) by his passing through a school of instruction. The latter is by far the most satisfactory, and entitles the officer to the letters *p.s.* after his name in the army list. Its advantage lies in the fact that for the period of his training he is subjected to, and has

placed before him, so definite a system of discipline that he can never forget it. Unfortunately it is only a small proportion of officers that can spare the necessary month. In these circumstances care should be taken that the examining boards for the ordinary "pass"—*p.* adopt some continuity in their methods. Although a good officer may just scrape through or possibly fail at one examination, yet a comparatively inefficient officer may pass at another.

4. *Supply of Officers and Men.*

The recruiting for the rank and file is practically carried out, in most corps, by the men themselves. There is a nominal establishment of 261,989 of all ranks, which has been fixed for the time at that figure, simply because it would be the total of the force if every unit were up to full strength. The actual number of enrolled volunteers is 225,423, which shows that there is no present danger of any falling off in the rank and file. Unfortunately they are short of officers by about 1,600 out of about 6,000. The actual numbers vary from time to time, but there does not seem to be any *serious* tendency to decrease. Many suggestions have been made to remedy this deficiency. The causes of it vary in different localities and in different circumstances. There are districts in which men of the right class do not exist in sufficient numbers to officer the local corps. There are districts, especially in towns, where they exist, but will not undertake the responsibility. There are corps in which the expenses are too great for the average would-be officer to afford. The first difficulty is very doubtful of solution. The second can be met, partially at any rate, by the encouragement of public schools cadet corps. The third can only be met by battalion commanders exercising a rigid supervision over finance and unnecessary private expenditure.

5. *Discipline.*

The discipline of the volunteers is usually maintained by moral force only. From the nature of the case the men

wish to obey, and the officers wish to assist their commands towards efficiency without any exercise of severity. There are, however, means of enforcing discipline. When a corps is serving with the regular forces, it is under the Army Act. Cases in which that Act has been put into force for purposes of punishment are very rare; since, in such conditions, only those volunteers are present who are keen to do their best. But, even when a corps is going through its ordinary routine, the commanding officer has very strong powers. He can fine privates in small sums for minor offences, as laid down in the rules of the different corps, such as coming on to parade with dirty rifles. He can order any officer, non-commissioned officer, or private under arrest while any parade lasts. He can call on any private to resign, or if he refuses, at his discretion dismiss him; in which case the defaulter will probably be seriously injured in his civil career. He can appoint a court of enquiry into any matters which he may think deserving of such a proceeding; and if the conduct of an officer is concerned, he may through the general commanding the district obtain a court of enquiry in that individual case.

Thus it is clear that when volunteers are actually engaged in military exercises there should be no difficulty in respect to discipline. But unfortunately when a commanding officer finds that any individual private is not making himself efficient in the real and not merely the technical sense of the word, he has no power of compulsion except by dispensing with that man's services. This he can only afford to do when there is a pressure of recruits, unless he is prepared to consent to a reduction in the numbers of his battalion.

The Volunteer Act, and in some degree the rules of corps based on the model rules in the volunteer regulations, provide the means for checking the arbitrary withdrawal of members from a corps. Thus a commanding officer is enabled to recover by civil process the value of clothing issued to a member should he not continue long enough in the corps to earn through the annual capitation grant the whole of the

cost thereof; also no volunteer can resign without giving a fortnight's notice. In case of the force being called out to meet actual or threatened invasion they would be *ipso facto* under the Army Act before the expiration of that fortnight, so that no resignations would be then possible.

6. *Permanent Staff and Inspection.*

The training of volunteer corps is carried out under the immediate instruction of the permanent staff, consisting of the adjutant and a proportion of paid sergeant-instructors. The adjutant is appointed to the corps for a period of 5 years, usually from one of the regular battalions of the territorial regiment, and receives additional pay and allowances according to the royal warrant and the volunteer regulations. He ranks regimentally as senior captain unless he is a subaltern, in which case he ranks with the captains according to the date of his appointment as adjutant. He instructs young officers in their duties, and, besides other work, in the case of country corps, frequently visits the outlying detachments. The sergeant-instructors under his immediate control carry out the training of the recruits in drill and musketry.

The system of appointing adjutants for five years dates from some twelve years back. At the outset of the formation of volunteer corps these important posts were filled by retired officers on an undefined tenure. The change tends, of course, to ensure that adjutants should be up to date in professional capacity. The remainder of the permanent staff (sergeant-instructors) are still employed "at pleasure." Any measures for securing their continued efficiency, such as provision for re-qualifying courses, or more vigilant inspection, as obtains particularly in the parallel case of the yeomanry, merit attention and encouragement. On the efficiency of the staff the good training of the men in the ranks, particularly during the recruit stage, must very largely depend. The sergeant-instructors are usually appointed from the line battalions of the regiment, receive pay according to the royal warrants, and are for purposes of discipline under the Army Act.

Inspection.—All volunteers are annually inspected by a regular officer appointed for the purpose. In the case of light horse by the inspector-general of cavalry; in the case of the artillery by the officer commanding the militia and volunteer artillery of the district; in the case of engineers by the commanding royal engineer of the district; in the case of the medical staff corps by the principal medical staff officer of the district; and in the case of infantry by the colonel commanding the regimental district. No volunteer may absent himself from inspection without leave from his commanding officer, which is only granted on a medical certificate or for some urgent cause. If he absents himself with leave he has to perform two extra drills; if he absents himself without leave he is returned as non-efficient, and in most corps has to make good the amount of the annual government grant thus lost. It is worth noting that only in few

cases do the officers commanding volunteer infantry brigades inspect the battalions under their commands.

7. *Finance.*

The financial arrangements of different corps differ so widely that it is not easy to speak generally on the subject. The income is derived from government allowances usually supplemented by subscriptions from the officers, sometimes from the men, and frequently from friends, who for this purpose are enrolled as honorary members, and thus obtain certain privileges. These allowances are set out in detail on pp. 131 and 132 of the volunteer regulations. Putting aside travelling allowances, the average private, who makes himself efficient, earns for his corps the annual sum of £1 18s. An officer who has passed in tactics and signalling, and who holds a certificate of proficiency, can earn a yearly sum of £7 5s., which, as he pays for his uniform, &c., is a clear gain to the corps. Out of the income so derived the following military expenses are expected to be met:—

- (1) Rent and maintenance of headquarters, armouries,¹ ranges, &c.
- (2) Uniform, accoutrements, and equipment of non-commissioned officers and privates.
- (3) Paid band.
- (4) All travelling expenses not provided for under special allowances.
- (5) Postage and stationery in addition to that allowed.

These items must evidently vary in different corps. Some, for instance, have merely nominal rents to pay for headquarters, to others the cost amounts to some hundreds a year. It is calculated, however, that by the exercise of a most rigid economy, and by skilful management of finance, the government grants will just cover the absolutely necessary requirements of average corps. But as a matter of fact

¹ By the decision, February 1893, in *Pearson, 2nd Middlesex A.V. v. the Holborn Union* it was held that volunteer storehouses occupied exclusively for volunteer purposes are exempt from all local rates.

every corps does look outside for financial assistance of some kind, and many depend upon it very largely.

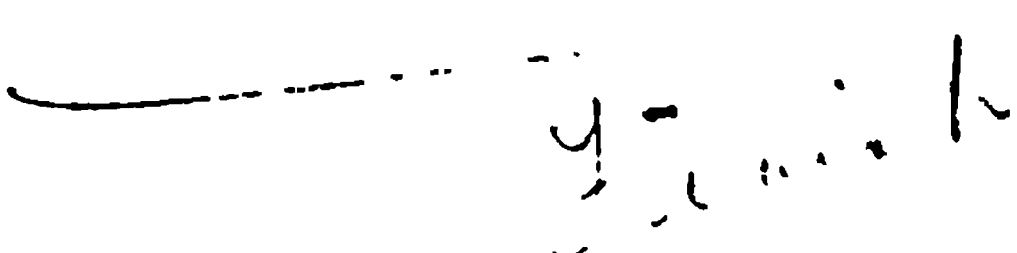
The large drill halls which belongs to whole corps in London and the large towns, and the smaller ones to be found in so many smaller towns and villages in the country for the use of the scattered companies, have been all paid for by private subscription. There are cases in which over £20,000 has been raised by a single corps for this purpose. The whole amount of capital spent on the formation of drill halls and ranges up to 1887 was no less than £538,537.

The present amounts of the capitation grants were fixed after consideration of the report of Lord Harris' Committee in 1887, although not exactly in accordance with the recommendations contained in it.

Financial arrangements are amongst the great difficulties with which commanding officers have to deal, the more so that they are personally responsible for sums expended not in exact accordance with regulation, and for debts incurred.

8. *Duties in aid of the Civil Power.*

The volunteers *as such* are not liable to be called upon by the civil power to act as a military body in the preservation of peace. Like other citizens, however, they are bound when called upon to act as special constables in their individual capacities. Since special constables elect their own officers, it is inevitable that they would be formed into units commanded by those they are accustomed to obey, a fact which adds enormously to their value. Usually they would be armed with the constable's staff only. In cases of "serious and dangerous riots and disturbances," however, and in cases where their storehouses and armouries are attacked, they may be called upon by the civil authority to arm themselves with and use "other weapons suitable to the occasion."



CHAPTER XXIV.

THE WAR OFFICE.

THE War Office is the medium through which the Secretary of State exercises his functions as administrator of the military system of the British Empire. It may be called the focus of the military administration. The Secretary of State has responsibilities in various directions. He is responsible to the Crown that the military forces and land defences of the kingdom are efficient. He is responsible to the Treasury that money is not spent except in accordance with principles which have been approved by that department; and lastly, he is responsible to Parliament, first, that he obtain a proper force, second, that the estimates of that force are made with due regard to economy, and thirdly, that the expenditure accords with the votes. Although he is not responsible for the formation of the local forces of the several colonies, he is often required to provide commanders for them; and in time of war they would probably drop into places in the general scheme of warfare under the War Office.

1. *Historical sketch of the growth of the War Office.*

Viewed historically, the War Office is the confluence of many streams of authority which have grown up from small beginnings as the military power of the nation has developed. To trace the history of all the streams would require a volume, and there would be little advantage in the result. A very slight sketch must here suffice. Omitting minor services, the three great departments of command, pay, and supplies may be dealt with. These must have been represented in some way even in the earliest armies; and in the great expeditions of Edward III. and Henry V., when feudal dispersion was

in course of gradual replacement by concentration under the royal authority, the germs from which later offices have sprung make a feeble appearance. There were, however, no standing armies then maintained, and the administration organized for a campaign died out with the disbandment of the troops after its completion.

Apparently the oldest of the military offices was that of the Ordnance. Arms were necessary for the king's troops: and the earliest troops to be maintained by the king would naturally have been the artillery, which included the gunners, the archers, and the cross-bowmen. The chief gunner, under whatever title he commanded, was the first such officer having some sort of a permanent department under him. Richard III. had a Master of the Ordnance—one Rauf Bigod—and a little later Henry VIII. constituted a Board of Ordnance with a Lieutenant, a Surveyor, a Store-keeper, and a Clerk to help the Master. James I., in 1604, gave the Master the title of Master-General. With an organization little altered, but much expanded, the Board of Ordnance continued to supply warlike stores, and to command the artillery and engineers, down to the commencement of the war with Russia in 1854. It was finally dissolved in 1855.¹

Pay, though irregular enough in early times, was as important as equipment; and the duties of Secretary-at-War developed with the growth of standing armies. A branch of the office of the then only Secretary of State did the work in the time of the Tudors. A separate War Office was constituted about 1620, under a Committee of the Privy Council, the clerk to the Committee being called the Secretary-at-War. From that time his office grew in importance; and the power of the purse gave him a predominant weight in military matters; although he had no direct jurisdiction over either the Commander-in-Chief or Board of Ordnance. This office of Secretary-at-War was conferred, in February 1855, on Lord Panmure, when he took the seals as Secretary of

¹ For early history of the Ordnance, see also chap. xiii.

State for War. It never after had a separate existence; and was abolished in 1863 by Act of Parliament.

The office of Commander-in-Chief—sometimes designated Captain-General, Generalissimo, or Officer Commanding-in-Chief—had many breaks of continuity from the time of General Monk—the Duke of Albemarle of the Restoration—to 1793, since which year it has been continuously held. It has always been, in a general way, under the control of the Secretary of State, who was responsible for the exercise of the royal prerogative; but it was only under an Order in Council of 1870 that the Commander-in-Chief's position was clearly defined.

Avoiding any detailed history, it will now suffice to glance at the military administration of the country at a few successive dates. In 1757 the following authorities existed:—

- (1) Commissioners of Chelsea Hospital.
- (2) Paymaster-General of the Forces, with a deputy in Parliament.
- (3) Secretary-at-War, in Parliament.
- (4) Ordnance Office, under the Master-General (a peer), with a Lieutenant-General, a Surveyor-General, a Clerk of the Ordnance, a Storekeeper, a Clerk of the Deliveries, a Treasurer; all six in the House of Commons.
- (5) Commander-in-Chief.

The military administration was thus represented by eight seats in the House of Commons.

In 1793, the great war with France had broken out, and the necessity for some centralization in war matters was evidently felt; for in that year the then Home Secretary, Mr. Dundas, was relieved of his home and colonial duties, and was created Secretary of State for War. He does not appear to have had any control over details, which were still carried out by numerous departments, but the appointment was a distinct advance as regards concentration of responsibility.

In 1797 the military administration comprised—

- (1) Secretary of State, in Parliament.
- (2) Commander-in-Chief.
- (3) Secretary-at-War, in Parliament.
- (4) Two Paymaster-Generals, both in Parliament.
- (5) Board of Ordnance.

All were essentially separate offices.

There was rather an increase than a decrease in the complexity of organization during the long war which ended in 1815. In that year the following *distinct* offices existed:—

- (1) Secretary of State for Colonies and War.
- (2) Commander-in-Chief's Office.

- (3) Secretary-at-War, in Parliament.
- (4) Superintendents of Military Accounts.
- (5) Board of General Officers.
- (6) Commissary-in-Chief.
- (7) Judge Advocate General, in Parliament.
- (8) Army Medical Board.
- (9) Commissioners of Barracks.
- (10) Commissary-General of Musters.
- (11) Two Paymaster-Generals, one in Parliament.
- (12) Board of Ordnance, comprising—
 - (a) Master-General.
 - (b) Lieutenant-General.
 - (c) Surveyor-General, in Parliament.
 - (d) Clerk of the Ordnance, in Parliament.
 - (e) Principal Storekeeper, in Parliament.
 - (f) Clerk of Deliveries, in Parliament.
 - (g) Treasurer.
- (13) Commissioners of Chelsea Hospital.

The army had therefore at least seven official votes in the House of Commons.

With the long peace which, with little interruption, lasted from Waterloo up to the war with Russia in 1854, economy, or more correctly parsimony, was the order of the day in military matters. The offices which had existed at the close of the war went on with few exceptions. Some amalgamations took place, and one or two died out as no longer required. In 1837 the country began to feel that the war administration was out of date, and a Royal Commission, under Viscount Howick (the present venerable Earl Grey), was appointed to report on the civil administration of the army. The Commission found the administration divided between—

- (1) Commander-in-Chief.
- (2) Secretary-at-War, in Parliament.
- (3) Paymaster-General, in Parliament.
- (4) Judge Advocate General, in Parliament.
- (5) Army Medical Board.
- (6) Board of General Officers.
- (7) Board of Ordnance, comprising—
 - (a) Master-General, in Parliament.
 - (b) Surveyor-General.
 - (c) Clerk of the Ordnance, in Parliament.
 - (d) Principal Storekeeper, in Parliament.
- (8) Commissioners of Chelsea Hospital.
- (9) Board of Audit.

The Secretary of State for War still existed; but he had no functions during peace. In 1801 the business of the Colonies had been transferred from the Home Secretary to the War Secretary; and when the war ceased, his duties necessarily were limited to colonial matters.

The Treasury worked the commissariat department; and, through it, supplied troops abroad with provisions and forage. Until 1834 they had

done the same for the troops at home. In that year the latter duty was made over to the Board of Ordnance.

The Royal Commission found that all these departments corresponded among themselves and each threw responsibility on the other till it could scarcely be located anywhere: and the confusion and delay were boundless.

The Commission quoted two instances of how work was done. First, as to the grant of commissions to officers:—

(1) The Commander-in-Chief took the Royal pleasure as to appointments to be made, and sent a memorandum of approval to the Secretary-at-War.

(2) The Secretary-at-War made out two lists, one for regiments in India and Ceylon, and one for Colonial corps [this went to the Colonial Office], and one for regiments at home or in other colonies than Ceylon [this went to the Home Office].

(3) The commissions were made out in the Home or Colonial Office, as the case might be; submitted by it to the Sovereign for signature; afterwards countersigned in the same office; and sent to the officer concerned.

Another amusing instance of circumlocution was when a regiment required arms. In this case the Commander-in-Chief having been duly moved by the officer commanding the regiment, notified the want to the Secretary-at-War who requested the Home Secretary to take the Royal pleasure that the arms should be issued and to notify such pleasure to the Master-General and Board of Ordnance. It is only fair, in this case, to add that human nature recoiled from this terrific round of notification; and it is recorded that while the documentary business was duly transacted, the commanding officer usually applied to the ordnance storekeepers, and got his arms far in advance of the authority.

The Royal Commission took a comprehensive view of the position and advised a concentration of authority and duties, not very unlike that which has since taken place. All military expenditure was to be included in one estimate. The War Secretary was to be in the cabinet, and to take the Royal pleasure on military questions. The War Office, ordnance office, and commissariat office were to be amalgamated, &c.

Nothing was done on these statesmanlike recommendations. The country slumbered on for seventeen years more; until the rude experience of the Crimean campaign, with its victories and its misfortunes, awoke public feeling to the necessity for administrative reorganization.

It is true that in August 1854, soon after the Russian war had broken out, it was recognized that there ought to be a War Secretary of State, and that the same man could not work War and Colonies. Accordingly the work was separated, a fourth Secretary of State (the Duke of Newcastle) being appointed for the duties of War. He formed a small office called the War Department, and assumed some control over the other departments. There was, however, no amalgamation of offices, and no interference on the part of the Secretary of State in the management of his subordinate offices. Correspondence between the offices continued as before, with the addition that they had the Secretary of State also to correspond with.

There was little or no visible improvement in the administration of the

forces, and the climax came in February 1855 ; when, after fierce debate, the House of Commons appointed a select committee of enquiry into the army administration. The government resigned ; and Lord Palmerston took the helm. Lord Panmure, who (as Mr. Fox-Maule) had formerly been Secretary-at-War, was appointed Secretary of State for War. He was a strong minister, and he saw at once that the control over the other offices must be real and not nominal, and that it was necessary for him to be the actual head of each. He, himself, took the appointment of Secretary-at-War, so that he had immediate control of the War Office, which he administered by the Deputy Secretary-at-War. He forthwith took over from the Treasury the commissariat business, and from the Home Office the duties connected with the militia and yeomanry. The Board of Ordnance was too powerful a body to be as subservient as the new minister desired. He therefore abolished it by the revocation of its letters patent on the 25th May 1855. The military functions of the Master-General as commandant of the artillery and engineers were transferred to the Commander-in-Chief ; and the Secretary of State directly administered the civil duties of the ordnance office through the clerk of the ordnance, who was retained.

While the Russian war lasted, the war department was worked as three great offices under the personal union of one head—the Secretary of State ; but as soon as the return of peace allowed of reorganization, steps were taken to unify the office into one great whole. The title War Department was early in 1857 changed to War Office. The deputy Secretary-at-War and the clerk of the ordnance disappeared, their functions being merged in those of the Under-Secretary of State. The clerical staffs were thrown into one long seniority list.

With such a complicated organization it was improbable that more than a gradual improvement could be attained. Lord Panmure had enough to do in simply abolishing the independent heads of offices, leaving the departments of those offices to form departments of the War Office. Thus he and his under-secretaries had to work a vast congeries of separate departments of business, each quite distinct in operation, though largely interdependent. There was no intervening authority between the heads of departments and the Under-Secretary of State. Consequently every question which a director of a department felt unable to decide came on to the Secretary of State for decision or at least to an under-secretary. No one man could have either strength or technical knowledge sufficient to carry on this varied work ; although for several years the attempt to do so was made. The want was *grouping* of departments, so that there might be intermediate authority between the Secretary of State and the head of a department.

It needed the energy of another strong Secretary of State, Mr. Cardwell, to accomplish this. He first determined that the military offices of the Commander-in-Chief should form an integral part of the War Office, the military functions of which had, since Lord Panmure's time, been increased by the growth, from 1859, of the volunteer force.

Having thus got the whole army administration into one crucible, Mr. Cardwell passed the War Office Act in 1870, under which and by Orders in Council of the same year the work of the office was divided into three great

departments under as many principal officers. These were (1) the Commander-in-Chief responsible for the discipline and *personnel* of the army ; (2) the Surveyor-General of the Ordnance, responsible for the production and supply of all arms, stores, and equipment, and for the maintenance of all fortifications, barracks, and other buildings ; (3) the Financial Secretary, responsible for the due appropriation of all moneys voted by Parliament.

This organization continued, substantially, till 1888, when, after several inquiries by Royal Commissions and Committees which pointed to too great a diffusion of responsibility, another Secretary of State, Mr. Stanhope, brought out a new Order in Council, making the Commander-in-Chief responsible for everything connected with the efficiency of the soldier, that is, his discipline, training, housing, clothing, food, and armament ; while the Financial Secretary is made responsible for production in its widest sense. He has to make or buy all stores, clothing, and arms which may be required, and to hand them over to the military authorities ready for issue to the troops. Further he must have money for all requirements for the pay and maintenance of all services.

This, in general terms, is the present military organization.

2. General Organization.

To carry out his multifarious duties the Secretary of State has the general assistance of the Under Secretaries and Assistant Under Secretary of State, with a small Central Office to aid him in his constitutional relations towards Parliament and towards other State organizations.

The details of this Central Office will be given later ; but irrespective of this small portion, the bulk of the office is divided into two great departments, the Military Department under the Commander-in-Chief, and the Civil Department under the Financial Secretary. These two high officers—of whom the first is appointed by the Crown on the nomination of the Cabinet, and the second is appointed by the Secretary of State himself, each being directly responsible to him—are mutually dependent and at the same time a check upon each other.

The Commander-in-Chief is responsible for the *personnel* of the army, militia, yeomanry, and volunteers; that each force is duly raised, trained, armed, clothed, fed, and lodged; that it is maintained in health and in the right places; and that there is organization for its command at all times and ready for its expansion in any emergency. He has the further duty of testing the quality (or proving) the warlike stores supplied by the Financial Secretary.

The Financial Secretary has to provide the arms, stores, and equipment of all kinds which the Commander-in-Chief may require, either in kind or in money. He has also to provide for the payment of the troops wherever situated; and for every expense connected with them. Further, it is his duty to check all accounts and to render to Parliament detailed statements of the issues of money made against the sums voted under the various heads for the military service. The Financial Secretary is, moreover, responsible that all expenditure is in accordance with the principles sanctioned by the Treasury and laid down in Royal Warrants, and also that no expenditure is incurred which can properly be avoided.

It will thus be seen that the Commander-in-Chief and the Financial Secretary are dependent on each other in that the former cannot equip his forces without the aid of the latter; while the Financial Secretary depends on the help of the Commander-in-Chief to enforce economy throughout the armed force. On the other hand, these functionaries exercise a mutual check. The Commander-in-Chief, whose object is to secure the maximum of efficiency, would naturally be held to strict regulations by the Financial Secretary: while any attempt on the part of the latter to carry saving of expenditure to an undue extent would be resisted by the Commander-in-Chief as prejudicial to efficiency.

In practice, the action of these two forces is automatic. The Commander-in-Chief knows that he has but a limited sum at his disposal. He therefore so arranges its expenditure that the best effect in every direction shall be obtained

The Financial Secretary is aware of the limit to which his economies can be carried without a cry being raised that efficiency is jeopardized.

3. *The War Office System not one of Centralization.*

Speaking generally, the functions of the War Office are administrative and not executive. The high officers under the Secretary of State are responsible that their several departments, serving with the army, are efficient and well-supplied in every way; and they review the work of the department wherever situated *after it is performed*; but the general commanding in a military district is in all departments the executive chief of that district. He can move his troops, feed his troops, and do very much as he thinks right with them, provided he does not infringe the general regulations for his guidance, and subject to his proceedings being called in question *afterwards* on a review at the War Office.

The function of the War Office is to provide the districts with commanders, those commanders with staff, troops, and administrative departments. It must further forward to the recognized depôts in each district money, arms, clothing, and stores to meet the necessities of the troops stationed there. It may require a commander to perform a specified duty or to combine for service with another commander; but it will not interfere in the details of district management, provided the commander gives periodical evidence that his command is efficient and in a satisfactory state. The War Office necessarily exercises a general supervision to prevent serious divergence of action taking place in different districts; and on all questions as to the patterns of arms and equipments it secures uniformity by a direct control.

To understand this is the more essential, as many persons suppose that the War Office system is one of extreme centralization, in which every local detail is worked from headquarters. There is no greater mistake; for, apart from the fact that such a system would certainly break down under the first strain of actual war, every effort has been made for

many years to decentralize by constituting each military district as a separate centre of action, and the intention is that each should have within itself its own staff, its complement of stores, and, except as regards very perishable supplies, all the apparatus required for the instant mobilization of the reserves and auxiliary forces which are to assemble within its territory. Abroad, the officer commanding has even fuller powers than an officer commanding a district at home.

With this preliminary statement borne fully in mind, a description of the organization of the War Office, bearing on every point of military administration, will not, it is hoped, lead to any misunderstanding as to the incidence of *immediate* authority over the troops. They are fully commanded by their own generals, who, in their turn, for purposes of order and uniformity, are under the supervision of the War Office.

4. *Internal Organization.*

It has been already shown that the main body of the War Office consists of the two Departments of the Commander-in-Chief and Financial Secretary. Each of these great departments is divided into branches known as "Divisions." A Division represents one broad but distinct province of the work of the department; and is ruled by a director or chief, with an analogous title, who is immediately responsible to the head of the department.

The "division" again consists of a greater or less number of "subdivisions," each with a distinct line of work. In the military department a staff officer, in the civil department a clerk (generally a principal), presides over each subdivision.

The Military Department, as stated, is under the Commander-in-Chief, who has, as assistant, the Adjutant-General. The latter, besides being chief of a division, exercises general control over all the other divisions of the military department; and is responsible to the Commander-in-Chief for their efficiency.

The divisions of that department are:—

- I. Adjutant-General's Division.
- II. Quartermaster-General's Division.
- III. Military Secretary's Division.
- IV. Works Division.
- V. Armaments Division.
- VI. Military Intelligence Division.
- VII. Medical Division.
- VIII. Military Education Division.
- IX. Chaplain General's Division.
- X. Veterinary Division.

I. ADJUTANT-GENERAL'S DIVISION.—As regards his own special division the Adjutant-General is responsible for the organization of regiments, brigades, divisions, and corps, for discipline, for mobilization arrangements, and for the command of all troops, the duties of the staff, recruiting, and for the auxiliary forces. He is assisted generally by the deputy adjutant-general to the forces.

There are eight subdivisions, each under a staff officer. Of these—

- (1) *The Organization Subdivision* (A. G. 1), under a deputy-assistant adjutant-general, besides regimental organization deals also with drafts for abroad.
- (2) *The Recruiting Subdivision* (A. G. 2) is under the inspector-general of recruiting (see Chapter XIX), and deals with the recruiting service and discharges.
- (3) *The Militia, Yeomanry, and Volunteers Subdivision* (A. G. 3), under a deputy adjutant-general, has to do with all constitutional and general questions affecting the militia, yeomanry, and volunteers, and with the appointment of officers to them.
- (4) *The Discipline Subdivision* (A. G. 4), under an assistant adjutant-general, deals also with technical education.
- (5) *The Artillery Subdivision* (A. G. 5), and
- (6) *The Engineers Subdivision* (A. G. 6), each under a deputy adjutant-general, deal with all military questions affecting their respective corps, and with the armament and equipment in their possession.
- (7) *The Mobilization Subdivision* (A. G. 7) is the adjutant-general's record office for details of mobilization, and for supervising the executive part of the defence schemes of the empire.
- (8) *The Cavalry Subdivision* (I.G.C.), under the inspector-general of cavalry, supervises the inspection of cavalry at home, and of all mounted troops including yeomanry, excepting the artillery.

Each subdivision exercises for the auxiliary forces the same functions as on behalf of the regulars, reporting when necessary to the deputy adjutant-general for militia, yeomanry, and volunteers.

II. THE QUARTERMASTER-GENERAL'S DIVISION.—The Quartermaster-

General is responsible that the army is supplied with food, water, forage, quarters, transport, and remounts. He moves troops from one command to another, and has the distribution of stores and equipment. The executive functions of the quartermaster-general in the several commands are carried out by the army service corps, under the direction of certain assistant and deputy-assistant adjutant-generals, known in the commands as "B," who take their orders from the generals commanding the districts.

The quartermaster-general's division has five subdivisions.

- (1) *The Barracks Subdivision* (Q.M.G. 1) under an assistant quartermaster-general regulates also lodging and encampment, and allowances in this connection, hire of land and buildings.
- (2) *The Transport Subdivision* (Q.M.G. 2) under a deputy-assistant quartermaster-general regulates the roster for service of corps at home and abroad, and the movements by land and sea (except the distinctly naval arrangements which are under the Admiralty) of troops and stores. (See Chap. XXI.)
- (3) *The Supplies Division* (Q.M.G. 3) under a deputy-assistant quartermaster-general has to do with the supply to troops and to everybody concerned of food, forage, fuel, light, and water. (See Chap. XXI.)
- (4) *The Remount Subdivision* (Q.M.G. 4) under the inspector-general of remounts superintends horse supply. (See Chap. X.)
- (5) *The Army Service Corps Subdivision* (Q.M.G. 5) under an assistant quartermaster-general, attends to the *personnel* of the army service corps, regulates the patterns of transport vehicles and equipment, and, generally, deals with questions as to organization necessary for supply and transport. (See Chap. XIV.)

III. THE MILITARY SECRETARY is responsible for the appointment, promotion, and retirement of all officers; for the selection of officers for the staff, for the grant of honours and rewards, and for the admission of cadets to the military colleges which prepare for the army.

As regards the auxiliary forces, the deputy adjutant-general thereof reports to him, relative to promotions, as do also the deputy adjutant-generals for artillery and engineers. With reference to his immediate work he has the assistance of two assistant military secretaries, one for Imperial, and one for Indian affairs, and two subdivisions.

- (1) *The Staff and Honours Subdivision* (M. S. 1) under a principal, deals with appointments to the staff and to commands of districts and corps and with honours and rewards. It keeps the individual records of all officers based on the periodical confidential reports, and also edits the official army lists.
- (2) *Appointments and Promotions Subdivision* (M. S. 2) deals with the duties shown by its name, and also with questions of admission of the candidates who pass for the Royal Military Academy and Royal Military College.

IV. THE WORKS DIVISION, under the Inspector-General of Fortifications and Royal Engineers, has charge of all building work for fortifications,

barracks, hospitals, and civil buildings, and of the maintenance thereof. The inspector-general is the custodian of all war department lands, and is responsible for railways, telegraphs, submarine mines, and generally for all the warlike apparatus for the defence of the Empire excepting arms, ammunition, and men. In his individual capacity he is also inspector-general of engineers, and is entitled to advise on all questions connected with the movements and efficiency of that corps. His agents are the Royal Engineers and the Royal Engineer civil staff.

The work is divided between three subdivisions, each under a deputy inspector-general of fortifications.

- (1) *The Fortifications Subdivision* (I.G.F. 1) which has charge of all work on the defences, artillery ranges, ordnance factory buildings, torpedo ranges, ballooning, &c.
- (2) *The Barrack Buildings Subdivision* (I.G.F. 2) which is responsible for the proper sanitary construction of barracks, hospitals, and civil buildings generally, and for rifle ranges. It also regulates the affairs of the Royal Engineer (civil) staff.
- (3) *The Special Barracks Subdivision* (I.G.F. 3) which is a temporary organization and takes charge of all building work under the Imperial Defence Loan of 1890.

There are two auxiliary establishments, of surveyors and draughtsmen respectively, who help either of the above subdivisions in technical details of their work.

V. THE ARMAMENTS DIVISION, under the Director of Artillery, is charged with the issue to the army of all arms, equipments, and stores; with the inspection of the same on receipt from contractors or from the ordnance factories, in order to test their quality; with the determination of patterns for arms, stores, and equipments; and the consideration of inventions pertaining to them, in connection with which services it controls the Ordnance Committee. Outside the War Office the executive functions of the Director of Artillery are carried out, as usual under the generals of districts, by the ordnance store department, and the inspectors of warlike stores. His deputy is the assistant director of artillery, and there are six subdivisions, viz.—

- (1) *Armaments Subdivision* (D.A. 1) under the assistant director of artillery, deals with all arms not actually issued to troops.
- (2) *The Stores Subdivision* (D.A. 2) regulates supply of stores and equipments.
- (3) *The Patterns Subdivision* (D.A. 3) under a special officer, deals with inventions (and rewards for them), patterns, experiments, and changes in matériel.
- (4) *The Ordnance Store Department Subdivision* (D.A. 4) under an assistant commissary-general regulates the *personnel* of the ordnance store department.
- (5) *The Inspection Subdivision* (D.A. 5) under the assistant to the director of artillery, besides the general supervision of the inspectors of stores wherever employed and all questions connected with inspection, is charged with making arrangements for the repair of small arms.

- (6) *The Equipments Subdivision* (D.A. 6) under an assistant adjutant-general, is responsible for all equipments (except artillery armaments) in the hands of troops, for stores on mobilization, and for general questions concerning the dress of officers and the clothing of soldiers.

VI. THE MILITARY INTELLIGENCE DIVISION, under the Director of Military Intelligence, has to prepare and maintain all necessary information for the military defence of the empire (excluding the United Kingdom), and to consider the strategical value of all schemes of Imperial defence; also to collect and compile information as to the strength, resources, and topography of foreign countries. It receives the reports of the military *attachés*.

The work is divided among six subdivisions [D.M.I. (A) to D.M.I. (F)], each under a deputy-assistant adjutant-general, of which the last (F) has charge of the library of the war department and of the preparation and issue of maps and plans, while the other five subdivisions take between them the various countries of the world.

VII. THE MEDICAL DIVISION, under the Director-General of the Medical Department, has charge of the administration of the medical establishments of the army and auxiliary forces. The director-general has a professional assistant and his work falls among four subdivisions to which work is allotted as follows:—

- (1) *A.M.D. 1*—*personnel* of medical officers, nurses, &c.
- (2) *A.M.D. 2*—medical statistics and questions of sanitation.
- (3) *A.M.D. 3*—supply of medicines, invaliding, recruiting, vaccination, and preparations for mobilization.
- (4) *A.M.D. 4*—organization of the medical staff corps.

VIII. THE MILITARY EDUCATION DIVISION.—For the subject of Military Education, see Chap. XXV.

The Director-General of Military Education controls the *personnel* of the army schoolmasters and inspectors of schools.

- (1) *The Officers' Education Subdivision* (M.E. 1), under the assistant director of military education.
- (2) *The Soldiers' Education Subdivision* (M.E. 2), under the director of army schools, has the management of the education and examination of warrant officers, non-commissioned officers and soldiers, and their children.

IX. THE CHAPLAIN-GENERAL governs the proceedings and supervises the *personnel* of the chaplains who belong to the Church of England. Religious differences render impracticable the formation of a DIVINE SERVICE DIVISION, which consistency would require. The Roman Catholic and Presbyterian chaplains, and officiating clergy of other denominations, are dealt with directly by the permanent Under-Secretary of State, in connection with the governing bodies of the respective denominations. Any clerical help the chaplain-general may require is afforded by subdivision C. 2, of the central department.

X. THE VETERINARY DIVISION (A.V.D.), under the Director-General of the Veterinary Department is responsible for the administration of the veterinary service and its officers, and, through them, for the health of the horses.

The CIVIL DEPARTMENT administered by the Financial Secretary comprises four divisions :—

- I. The Finance Division.
- II. The Contracts Division.
- III. The Clothing Department.
- IV. The Ordnance Factories.

The Financial Secretary has no deputy with authority over all his divisions; but, in his absence, the Accountant-General signs for him.

I. THE FINANCE DIVISION is under the Accountant-General, who has the assistance of a deputy accountant-general and three assistant accountant-generals. The division is by far the largest in the War Office. The accountant-general has the duty of advising the financial secretary on all financial questions: he compiles the estimates for Parliament; issues money, by drafts on the paymaster-general, for all army services whatsoever; audits the expenditure of cash and stores; and prepares the accounts for Parliament. At present he also administers the army pay department; although, properly, this is an executive function which should fall to the military department, as it probably will when certain arrangements can be perfected. The division comprises 14 subdivisions each, with one exception, under a principal. They divide the accounts and their audit between them :—

- (1) *Officers' Pay Subdivision* (F. 1) treats of all questions which arise as to the pay of officers; the establishment of the War Office itself; and the clerical establishments of the manufacturing departments and of Chelsea and Kilmainham hospitals.
- (2) *Men's Pay Subdivision* (F. 2) has functions corresponding, as regards all below officers, to those of F. 1.
- (3) *Examining Subdivision* (F. 3), a very large subdivision, examines all agents' and paymasters' accounts to see first that the charges are correctly computed and, secondly, that they are in accord with regulation.
- (4) *Auxiliary Forces Subdivision* (F. 4) is responsible for the charges incurred for army reserve, militia, yeomanry, and volunteers.
- (5) *Supply Services Subdivision* (F. 5) manages financial questions pertaining to all perishable supplies and to the purchase of horses; and examines and pays contractors' claims and other accounts connected with them.
- (6) *Effects, &c., Subdivision* (F. 6) governs the distribution of the effects of deceased officers and soldiers, military savings banks,

remittances and allotments for soldiers families; gratuities for service; stoppages for maintenance of soldiers wives, &c.

- (7) *Non-effective Charges Subdivision* (F. 7) manages questions concerning the retired pay and the half pay of officers, the superannuation of civilians, and the pensions of soldiers; as well as the pensions and compassionate allowances granted to the families of deceased officers.
- (8) *Issues and Book-keeping Subdivision* (F. 8) concentrates into a general account for Parliament all the charges passed in other subdivisions, bringing every charge to its proper head. It also makes orders for issues—in bulk—of money to paymasters and to contractors. Returns of expenditure, and answers to queries raised by the audit office are compiled in this subdivision.
- (9) *Estimates Subdivision* (F. 9) has the calculation and compilation of the estimates for Parliament; watches expenditure under the different votes, and the administration of the army pay department.
- (10) *Transport Charges Subdivision* (F. 10) deals with charges under this title, and also with field allowances.
- (11) *Works and Barrack Charges Subdivision* (F. 11) deals with all financial details as to fortifications, barracks, hospitals, and civil buildings, the letting of property, lodging money, rents, rates, and taxes, water charges, &c.
- (12) *Armaments and Store Accounts Subdivision* (F. 12) checks expenditure on arms, stores, and clothing, including that of the ordnance factories. It also edits the priced vocabulary of stores; and takes account of financial transactions for stores provided for the navy, other departments, India, and the Colonies.
- (13) *Store and Clothing Accounts Subdivision* (F. 13) examines cash accounts for clothing, and store accounts for stores and clothing; prepares balance sheet of the clothing factory, and return for Parliament of warlike stores.
- (14) *Manufacturing Accounts Subdivision* (F. 14) under the accountant and auditor, conducts a local audit of the accounts of the ordnance factories, it also takes stock from time to time in the ordnance factories and the store department at Woolwich.

II. THE CONTRACTS DIVISION is under the Director of Army Contracts, who has the assistance of an assistant director. The director of army contracts is responsible for the economy of all purchases, contracts, and sales not made locally, and for a general supervision of those so made. He reports on the relative cost of goods made in the ordnance factories and purchased from the trade. He has three subdivisions, each under a senior clerk :—

- (1) *Stores and Clothing Subdivision* (D. C. 1) controls all contracts and purchases of miscellaneous stores and clothing.
- (2) *Provisions and Barrack Stores Subdivision* (D. C. 2) makes contracts according to its title.
- (3) *Armaments Subdivision* (D. C. 3) arranges all purchases of warlike stores and materials for government factories (except clothing and building materials).

III., IV. THE CLOTHING DEPARTMENT AND ORDNANCE FACTORIES¹ differ from all the other divisions of the War Office in that their heads, the Director of Clothing and Director-General of Ordnance Factories, while administrative officers at headquarters, are themselves elsewhere executive officers controlling and directing large manufacturing departments. As an administrative functionary, the director of clothing is responsible that there is clothing in hand for the ordinary supplies of the year for the army, militia, and yeomanry, and also that he has reserves, either at hand or with easy access, for all the forces which would be called up on mobilization. He is further required to supply the volunteers, on repayment, with such material for clothing as they may require. He is also responsible for the efficient and economical working of the clothing factory, and for the inspection and due examination of supplies sent in by the trade. He has the assistance of an assistant director, and of a considerable staff of clerks at Pimlico; but the latter belong mainly to his executive duty of distributing clothing to the forces.

The director-general of ordnance factories is the adviser of the Secretary of State on all questions of manufacture. He has to make such guns, carriages, and warlike stores as may be required (and are not provided by contract) for the military and naval forces of the empire. He is responsible for their proper construction and also that the factories are conducted on a system enabling them to be self-supporting.

The system of promulgation of orders affecting the army requires mention. They are published in printed form as *Army Orders*. These are issued monthly, signed by the adjutant-general as approved by the Secretary of State. They contain all orders, and announcements of changes in regulations, applicable to every branch of the army, including the auxiliary forces and departments, and whether bearing on discipline or on finance.

With the above orders is issued monthly, under the title "List of changes in war material and of military stores," a description of all articles of store or equipment introduced into the service from time to time. This "List of changes," which form a series since 1859, is of much importance as containing the authoritative particulars of the nature of the several articles, as well as of their correct nomenclature, the latter being subject to modification in the "Vocabulary of stores," which is published officially from time to time.

Prior to the 1st January, 1888, "General Orders" to the

¹ See chap. xxv.

army, bearing on discipline and organization, were issued by the Commander-in-Chief, and all orders on financial matters, the issue of royal warrants, of regulations as to equipments and commissariat and other services, were promulgated under the title of "Army Circulars," signed by the Permanent Under Secretary of State. This system had obtained since 1867. Before that year the Army received its orders from four sources—viz., "War Office Circulars" issued by the Under Secretary of State; "Circular Memoranda" of the Adjutant General; "General Orders" by the same officer, and "Occasional Memoranda" by the Military Secretary.

We have left to the last, though it ranks first, the small but important CENTRAL OFFICE. It is, *par excellence*, the office of the Secretary of State. It is the medium of communication, otherwise than on details, with authorities outside the military service; and it administers those duties within the War Office which are necessary for the harmonious working of the whole—providing, so to speak, oil for the wheels of the official machine. The Central Office comprises four subdivisions, under civilian heads, directly responsible to the Permanent Under Secretary of State.

C. 1 has charge of the general registry of the office. All letters are received in it, registered according to their subjects, annexed to their antecedent papers, and distributed to the subdivisions which will work them. It records the movements of papers among the subdivisions and divisions, and finally takes charge of papers after they have been acted on. This subdivision also manages the telegraphs and everything connected with the circulatory system of the whole office.

It may be convenient here to state briefly how the rather mysterious numbers seen at the left-hand top corner of War Office letters are arrived at. The number is that of the paper which has given rise to the letter, and any number of letters arising from the same paper would bear the same distinguishing number. The numbers are written either as a simple fraction,

as $\frac{35101}{323}$, or as a complex fraction $\frac{23}{\frac{8}{711}}$. In the first case the top figure

indicates a specific subject, the lower figure shows that the paper was the 323rd paper which had been registered under that heading. In the complex fraction the "23" shows a subject—probably a comprehensive one—the 8 signifies a division of that subject. For example, if "23" stood for clothing (which it does *not*), "8" might mean boots; and then the

bottom figure would show that the paper was the 711th which had been registered under that subheading.

C. 2 deals with many miscellaneous subjects which it would be difficult to apportion to specific subdivisions in the military department, such as non-conformist clergy, orders of knighthood, and correspondence on colonial military subjects. It also supervises the establishment of the office in connection with F. 1. In case of war, this subdivision conducts the correspondence (except on military details) with the general commanding.

C. 3 is responsible for the editing of all regulations. The initiation of new rules rests with the subdivision administering them; but they may not take effect until passed by C. 3, as being in accordance with general principles and in harmony with other regulations.

C. 4 has very varied functions. It conducts the Parliamentary business of the War Office; edits returns for Parliament; collects and digests information to enable the Parliamentary officers to reply to the numerous questions on all subjects connected with military administration which are put to them. Such questions may refer to the movements of a great army, to the stoppage of a drain in some obscure village in Ireland, or to the discharge of a Lascar in Hong Kong. Their great variety is only equalled by the short notice at which they usually have to be answered.

The subdivision is responsible that bills for Parliament are submitted to the Treasury, prepared by the parliamentary draftsman, considered by the solicitor, and that all necessary information is available during their passage through the House. It has to look after private bills as they pass through Parliament, with a view to prevent any infringement of war department rights.

The formation of royal commissions and special committees of enquiry on military subjects rests with this subdivision, and the epitomizing and submitting of their reports. It has charge (as agent for the director of military intelligence) of the library in Pall Mall—on its own account of the military records at the Public Record Office; also charge and distribution of all parliamentary and confidential papers. The actuarial work of the office, including special calculations and the constant calculation of the non-effective charge against India, falls under C. 4. It manages all printing and supplies of stationery and books for the War Office and for the army generally, the Stationery Office being the actual executive employed. Lastly, it has distinct executive functions in supplying to the troops everywhere the innumerable army forms used in the transaction of regimental and staff business. For this purpose it has a large dépôt at Pimlico.

The legal business of the War Office is performed, as part of the central functions, by the solicitor to the Treasury for England, by a solicitor specially appointed for Scotland, and by the Chief Crown Solicitor in Ireland.

Having shown in the preceding slight—but unavoidably tedious—sketch how the very varied work of the War Office is divided, it will be well to state in general terms the course through which the work passes.

The normal formation of a subdivision is to have a

principal, a senior as his deputy, perhaps a junior of the higher division, and a body of clerks of the second division. Where there is a staff officer he takes the place of the principal. If the subdivision is large, the second division clerks are usually organized in sections representing particular parts of the work. Each section is under an experienced clerk of the second division.

The new papers arrive in each subdivision from the central registry C. 1 thrice daily. They are at once distributed among the sections. If, as in the majority of cases, they are mere routine, involving only some act distinctly provided for in regulation, the head of the section is able to dispose of them. If a new principle, or some more or less important question arises, the matter is brought before the principal, who may decide it, if he feels qualified to do so, may refer it to some other division, or may pass it on for decision to the head of his division. The latter again may settle the point at issue, or, proportionately to its importance, may pass it on to the head of the department, and in any very important case to the Under Secretary of State and even the Secretary of State himself. In every case of appeal against a decision, it must be dealt with by an official at least one step higher than him who previously decided the point appealed against.

There is thus a system of graduated responsibility and, at the same time, of filtration, by which the higher officers are relieved from the mass of detail by which the lower strata of the office are constantly flooded. The time of the Secretary of State, who has such large questions to consider, is saved from waste on a number of petty cases with which an inferior officer is quite capable of dealing.

5. Relations with other Departments of State.

The duties of the War Secretary extend in so many directions, that there are few of the great State Departments with which he is not in more or less frequent communication.

His relations with the Treasury have appeared throughout

this chapter ; but it may be said generally that the Secretary of State can only administer, as regards all matters involving expenditure, under regulations approved by the Treasury. Therefore, any modification of a financial regulation, or any new work or building, or any purchase involving a new principle must be considered and sanctioned by that department before it can be proceeded with.

The War Office is liable to be called upon by the Home Office to afford support to the civil power in cases of threatened riot or disorder.

With the Colonial Office communications may have reference to the defence of a colony against neighbouring aggression, to the military proceedings of the local government, or to the contributions required from them in aid of their military defence.

With the Foreign Office communication is held on all subjects connected with foreign countries that have an interest or bearing on army matters—a correspondence that is sometimes of great importance.

As regards the India Office, since the War Office provides the British portion of the army in India, and India has to pay for it, it is natural that communications should be constant.

The Local Government Board comes in contact with the War Office mainly with regard to the families of soldiers or to discharged soldiers becoming chargeable on local unions.

The Board of Agriculture has control of the Ordnance Survey, which is much required for army purposes.

The Admiralty provides transport for troops and stores ; and combines with the War Office in securing the safety of fortified ports and coaling stations.

The Paymaster-General acts as banker for the War Office, producing money, as voted by Parliament, on the requisition of the Secretary of State for War.

The Stationery Office produces all the printing, stationery, and books required for the office proper, and for the army throughout the world. With the exception of army forms it distributes to out-stations on the orders of the War Office.

The Office of Works provides the buildings and furniture, with gas and water, for the War Office, and for the headquarters in Dublin.

The Audit Office has a branch at work in the buildings of the War Office, seeing that the various army charges are placed to the right votes of Parliament, and also testing the audit carried out by the Accountant-General of the War Office by going into the details of a vote here and there.

The more important of the interdepartmental relations are consolidated by two standing committees, to one or both of which all matters of Imperial military interest are referred for consideration before decision. These are, "The Defence (naval and military) Committee," and "The Colonial Defence Committee."¹ The first is a joint War Office and Admiralty Committee :—

President.—The Parliamentary Under Secretary of State for War.

Members.—The First Sea Lord of the Admiralty.

The Admiral, Director of Naval Ordnance.

The Admiral-Superintendent of Naval Reserves.

The Adjutant-General.

The Inspector-General of Fortifications.

The Director of Artillery.

Secretaries.—Deputy Inspector-General of Fortifications.

The Captain, R.N., attached to Inspector-General of Fortifications.

The Colonial Defence Committee is composed of :—

President.—The Inspector-General of Fortifications.

Members.—The Permanent Under Secretary of State for the Colonies.

An Officer of the Treasury.

The Head of the Intelligence Division, War Office.

The Head of the Intelligence Division, Admiralty.

¹ The several officers of both committees are appointed by name, but are shown here by the offices they hold.

The Head of the Mobilization Subdivision, War Office.

An Officer, Director of Artillery's Department.

Secretary.—A Major, Royal Engineers (attached to office of Inspector-General of Fortifications).

It will be seen from this chapter that the War Office has a vast variety of work to perform, with ramifications into almost every department of State policy; that, while doing all it can to prevent centralization, it has necessarily an enormous mass of routine duties; besides which, again, there is the care, continually undergoing fresh development, involved in the responsibility for the internal and external defence of the Empire.

CHAPTER XXV.

MILITARY EDUCATION. EDUCATIONAL ESTABLISHMENTS.
CAMPS OF EXERCISE. ORDNANCE FACTORIES. ARMY
CLOTHING DEPARTMENT. VARIOUS COMMITTEES, &c.

MILITARY EDUCATION.

A DIVISION of the War Office¹ directs the subject of military education ; the work is carried out in two subdivisions, which respectively deal with :—

The education of officers.

The education of non-commissioned officers and soldiers.

Officers.—Under this head there have to be considered :—

First, preliminary or general education ; as preparation for further technical instruction.

Secondly, special instruction in military and technical subjects required for an officer in the army.

The former includes the education which is undergone preparatory to the literary examinations—

- (1) For admission to the Royal Military College, Sandhurst.
- (2) „ „ to the Royal Military Academy, Woolwich.
- (3) „ candidates from the universities.
- (4) „ „ from the militia.
- (5) „ „ from colonial local military forces.

Under the latter is classed the instruction given,

- (1) To cadets at the Royal Military College, Sandhurst.
- (2) „ „ Royal Military Academy, Woolwich.
- (3) In military subjects, to candidates from universities, from the militia and from the colonies.
- (4) To officers preparatory to promotion.
- (5) To students at the Staff College, and senior class Artillery College.

¹ See chap. xxiv.

Prior to the Crimean war the education of officers under both heads had a very narrow scope.

The Royal Artillery and Royal Engineers were officered exclusively by cadets from the Royal Military Academy, Woolwich. Cadetships were conferred by the Master-General of the Ordnance, and those nominated by him were admitted on a qualifying examination according to their age, which was between 14 and 16. They remained at the Royal Military Academy for periods varying from 3 to 5 years, and the numbers required for Royal Artillery and Royal Engineers respectively were taken twice a year from those highest in the first class. The instruction of these cadets, as far as it went, was sound and thorough. Besides a general qualification, all cadets had to qualify specially in mathematics, fortification and French.

For the infantry and cavalry of the army a similar institution existed in the Royal Military College, Sandhurst, to which boys were admitted on the nomination of the Commander-in-Chief, between the ages of 13 and 15, after a qualifying examination similar to that for the Royal Military Academy. This college, however, was only sufficient for a very limited number of the officers required, and the majority of the officers of cavalry and infantry entered those branches by direct appointment of the Commander-in-Chief. Formerly no literary qualification at all was exacted from such candidates, but for some years prior to the Crimean war a qualifying examination of a low standard was established.

The army of the Honourable East India Company was officered on much the same plan as the British army. The Company maintained a military college at Addiscombe at which a number of cadets were trained, and from which the whole of the officers were supplied for the corps of Indian artillery and engineers, as well as a small number for the infantry. The rest of the infantry and all the cavalry of the East India Company were officered by direct appointments, after a qualifying examination, upon the nomination of the directors of the Company.

No special instruction¹ was provided for officers after entering either the Royal or the Indian armies, nor were they required to submit to any test of their professional knowledge. A very small number were allowed to study at the so-called senior department at Sandhurst, where instruction in mathematics, fortification, military surveying, French and German, was afforded to a limited number of officers. The senior department was first established in 1803 for 30 officers, reduced in 1820 to 15.

The foregoing gives a brief general account of the education of officers of the British army up to the time of the Crimean war.

In 1858, the system of competitive examination was introduced for admission to the Royal Military College and Royal Military Academy, the ages for admission being raised, and the period of residence shortened. The majority of the commissions in the cavalry and infantry continued, however, to be given by direct appointment after a qualifying examination.

The East India College at Addiscombe was abolished when the East India Company was dissolved in 1859, and all officers for the Indian army were thenceforward obtained through British regiments.

In 1871 the purchase system was abolished, and a rule was established that commissions in the cavalry and infantry should, as in the artillery and engineers, be granted solely as the result of a competitive examination. This did not come into operation till 1875, when the system as now ob-

¹ It was in order to meet in some measure the want in the Royal Artillery of means for further instruction that the R.A. Institution at Woolwich was founded with Government assistance, through the exertions of Sir Henry Lefroy and other well-known artillery officers. The institution, which is of great value to the regiment, is managed by a Committee and Secretary, all being R.A. officers; it possesses an extensive military library, model room, and museum, has a lecture theatre and class rooms, and assists its members in the study of their profession and of modern languages, &c., both at Woolwich and at out-stations. The institution publishes monthly its "Proceedings," which contain original articles and translations on military subjects, more especially on those connected with the science of artillery.

taining was practically founded. The officering of the British army may be said to be at present supplied as follows¹ :—

Royal Artillery and Royal Engineers.	{ By open competition through Royal Military Academy. ²	
Infantry and Cavalry	(i) By open competition, Royal Military College.	50 per cent.
	(ii) By competition from the militia	25 „ „
	(iii) By qualification, through the Colonies, and also through the ranks.	25 „ „

As regards the admission to cavalry and infantry it may be observed of the classes enumerated that—

- (i) refers to those who enter Sandhurst by a competitive examination in literary subjects;
- (ii) refers to candidates from the militia who, having passed a qualifying examination in literary subjects, are subsequently subjected to a competitive examination in military subjects; whilst
- (iii) includes :—
 - (a) Queen's cadets and others, who enter the Royal Military College by a qualifying examination.
 - (b) University candidates, who compete amongst themselves for a limited number of commissions.
 - (c) Candidates from the Colonial military forces, or Colonial universities, who are practically nominated after a qualifying examination.
 - (d) Non-commissioned officers promoted from the ranks, who have to pass a qualifying examination of a low standard.

The introduction of the system of open competition for admission to Woolwich and Sandhurst has naturally had the result of raising the standard of education of officers. The syllabus for these examinations has varied from time to time, but one general principle has usually been borne in mind—viz., that the officers of the army should be drawn from those who have been educated at the higher classes of schools, and who have received a sound general education.

Advocates have not been wanting for a system under which special military education should begin at an early

¹ See chap. xviii. (Supply of Officers.)

² Four commissions are annually given in the Royal Artillery to artillery militia officers, and a few are given in the Artillery and Engineers from the ranks with a view to service in special branches of these corps. See also chap. xviii, *ut supra*.

age ; this would mean building the superstructure without first securing that the foundation has been well and truly laid—a palpable error, and one which, it is feared, is widely spread among all classes at the present day. To quote the words of an eminent man, the present system of primary education in England “has the radical defect of aiming at instruction in knowledge rather than the training of the faculties.”¹

Because it was formerly the custom to devote nearly the whole of the education to subjects which were considered to have a special fitness for developing the faculties of the mind, and thereby the super-addition of the requisite technical and professional training for officers had been neglected, a cry was raised to overthrow the whole of the former and devote everything to the latter. From time to time the cry is raised anew, to confine the examination of candidates for the army to those subjects only which can be shown to be directly useful to the officer in his military capacity, and the study of which would be consequently continued at the military colleges. Such ideas are, however, entirely opposed to the general principle which was expressed by the Royal Commission of 1868 in the following words: “It is evident that the possession of mental faculties, disciplined and developed by intellectual training . . . must greatly enhance the individual value of any officer employed in your Majesty’s Service ; while, on the other hand, no person would be fit to hold a commission whose educational acquirements were not sufficient, not only to enable him to discharge the routine duties of his profession, but also to maintain an ascendancy over those he would be called upon to command.” The Royal Commission endeavoured therefore to provide every facility and inducement for young men to pass directly from the public schools to Sandhurst and Woolwich, leaving their further instruction in techni-

¹ Lord Armstrong in the “Nineteenth Century,” July, 1888 :—“The vague cry for technical education.”

cal and professional subjects to be carried out in those institutions.

In thus excluding professional subjects from the entrance examination, the Royal Commission acted on the principle which guided Lord Macaulay's committee in framing the scheme for admission to the Indian civil service; that is to say, they provided that the time of *unsuccessful* candidates should not be wasted in studies which would afterwards prove useless to them. This consideration is obviously of primary importance. To include professional subjects in the entrance examination would inevitably diminish the number of candidates; it would also require that boys should be trained specially for the army at an early age, apart from those training for the liberal professions, and would render those who are unsuccessful in the examination unfit for other professions. It is moreover most desirable that boys of 15 or 16, who have had no previous intention to enter the army should be at no disadvantage if they, at that age, wish to take up a military career; to exclude these boys would cut off a source from which some of the best officers are obtained, such as have selected their profession for themselves, and pursue its duties with zeal and diligence.

It need only be added that the results of the present system are most satisfactory.

After the abolition of the purchase system, it was decided that lieutenants should undergo an examination in professional subjects before being considered eligible for promotion to the rank of captain, and subsequently the same rule was established for captains before promotion to major. The professional subjects selected were the following,—viz., field fortification, military topography, tactics, military administration, and military law.

A far greater impetus to the study of professional subjects had, however, been already given by the establishment of the Staff College.

During the Crimean war the shortcomings of the British military system had been very apparent in the staff.

Much of the suffering undergone by the troops was due to the want of knowledge and foresight on the part of the staff, which no exertion on the part of the chiefs of the staff could remedy. The war was no sooner ended than it was decided to establish a college for the education and training of staff officers. The Staff College was built in the neighbourhood of the Royal Military College, and was intended to accommodate 30 officers. The course lasted for two years. Those admitted were selected by competitive examination, five of the number being allowed to come from the artillery and engineers, and 25 from the guards and line. The numbers have been raised at various times, and the present number of students is 64, composed as follows:—

Royal Artillery and Royal Engineers.	Guards and Line.	Indian Army.	Royal Marines.	Nominated by Commander- in-Chief.
12	36	6	2	8

Half of the above numbers are admitted every year, the students being formed in two divisions. The institution of the staff college has fostered, in a remarkable degree, a taste for the study of military subjects among junior officers in the army of all branches of the service.

Non-Commissioned Officers and Soldiers.—It has never been deemed necessary to exact any educational qualifications from recruits on enlistment, except for the Royal Engineers and the departmental corps, who are required to be able to read and write. This qualification was first exacted for the former about 1860.

Early in the present century, however, the necessity of encouraging education amongst soldiers was recognised, and in August, 1811, the Duke of York, as Commander-in-Chief, addressed a letter to the Secretary at War in which he recommended that a school might be formed in each battalion for the instruction *gratis* of the boys receiving pay, and the

soldiers' children; His Royal Highness observing that "the future discipline of the service is much involved in the importance of this subject."

This was sanctioned, and in each battalion or corps a regimental school was established under the charge of a sergeant schoolmaster. In the following year, evening classes were established for the voluntary instruction of non-commissioned officers and soldiers, a monthly fee being charged to the men.

This system continued in force until 1849, when it was decided to replace the sergeant schoolmaster by trained masters. With this view the Normal School had been opened at Chelsea in 1846, for the purpose of training students for the post of army schoolmaster; and on 10 April 1849, a general order was issued by the Duke of Wellington, ordering all recruits to attend school for 2 hours every day until dismissed drill, a compulsory payment of fees being required from each scholar: school fees were subsequently charged also for soldiers' children.¹ At the same time the management of army schools was placed under the Reverend G. R. Gleig, chaplain-general, who was appointed inspector-general of army schools.

Although a certain amount of compulsory education had thus been in force for some years, there was no regulation as to its being a necessary qualification for a non-commissioned officer, and this was left to the discretion of individual commanding officers; some of these exacted the knowledge of reading and writing before promoting a private to non-commissioned rank, whilst others made no such rule, and it was stated by an officer who joined the army in 1826 that at that time the sergeant major of his regiment, an old Peninsular soldier, could neither read nor write. In 1857, however, it was laid down, as a general rule, that no soldier was to be promoted corporal, except in the field, who was not tolerably proficient in reading, writing, and arithmetic. At the same time school fees were remitted to all soldiers attending school for that measure of instruction, and commanding officers were desired to encourage recruits to attend school after being dismissed drill. The payment of school fees by adults was finally discontinued in 1864.

In the year 1860 the administration of army schools passed to the council of Military Education, and the following year certificates of education were introduced in 3 classes—these were signed by the schoolmaster and issued on the recommendation of the commanding officer.

In 1870 army schools passed under the jurisdiction of the Director-General of Military Education, and in the succeeding year all recruits were required to attend school compulsorily till they obtained a 4th class certificate of education; a 3rd class certificate being required for promotion to corporal, and a 2nd class for promotion to sergeant. In 1879 the compulsory attendance of well-behaved recruits at school was limited to two years, and in 1882 it was ruled that no recruit should be excused compulsory attendance till he had put in 220 attendances at school. In 1885 compul-

¹ It is interesting to observe that this was almost exactly the system adopted under the Education Act of 1870, the first Act of Parliament which enforced general education in England.

sory attendance was further limited to 6 months or until a man obtained a 4th class certificate.

In 1887 upon the recommendation of a War Office committee, compulsory attendance of recruits was abolished, as also the 4th class certificate of education. Non-commissioned officers are now required to attend school until they obtain a 2nd class certificate, and a 1st class certificate is exacted before promotion to warrant rank or to the higher grades of non-commissioned officers. Commanding officers are, however, directed to encourage soldiers to attend school voluntarily, and to afford them every facility for so doing.

Up to 1887 each battalion and regimental command had its own regimental school; in that year these establishments were abolished and garrison schools took their place: a battalion has now only an infant school. The regulations are, however, sufficiently elastic to permit of detachment schools being formed whenever there is a proved necessity.

It is supposed by many persons that compulsory education having been in force in England since 1870, the effects would be apparent amongst recruits, and that there would be less need to keep up army schools. It is undoubtedly the case that the number of men who are totally illiterate has diminished, but it is to be feared that in many cases their attainments do not extend much further than a moderate power of reading and the ability to sign their names in writing. This is easily explained by the fact that boys rarely remain at school after 14 years of age. Between that age and 18, when the recruits enlist, there is plenty of time for those engaged in manual labour to forget almost all they ever learned, and in many cases much schooling is needed before a recruit can attain the low standard required for promotion to corporal, a standard corresponding to that required from a boy of ten in a board school.

Very much still depends on the encouragement given to education by commanding officers. In some corps there are always men ready to take the stripe. In others, there is a lack of such men. If it were borne in mind that education has not merely for its result the attainment of certain necessary accomplishments, but is the chief agent for training the faculties so as to enable the soldier to carry out his duties with intelligence, means would be found for stimulating the necessary education of soldiers, by allowing

men exemption from certain duties for a time as a condition of their attending school regularly. It cannot be doubted that the high reputation as soldiers, so deservedly enjoyed by Scotsmen, is largely due to the fact that in Scotland education has been enforced on all classes for more than two centuries, and that a wholly illiterate Scotsman is almost unknown.

EDUCATIONAL ESTABLISHMENTS.

A summarized description of each is given below, which will give an idea of the whole system and its machinery.¹

(i) *The Royal Military Academy, Woolwich*, is exclusively for the training of 200 gentlemen cadets for commissions in the Royal Artillery and Royal Engineers. The course of instruction lasts two years divided into 4 terms; the first term is the fourth class and so on. All the cadets are educated together in the third and fourth classes but on leaving the third the cadets promoted into the second class bifurcate into two separate divisions, the senior having the option of selecting the engineers so far as vacancies are available, the remainder forming the artillery division. After this, the training for the artillery and engineers is separate and no transfer is allowed. Cadets passing the final examination will be gazetted to commissions as vacancies offer, hence the seniors may be commissioned long before the lowest on the list; a fact, the importance of which is often disregarded by the youthful cadet, but brought home to him in later years. The governor and commandant of the R.M.A., is appointed alternately from the R.A. and R.E. (See Regulations and syllabus for course of instruction at R.M.A. Woolwich, a government publication; also the standing orders).

(ii) *The Royal Military College, Sandhurst*, is for the training of 360 gentlemen cadets for commissions in the cavalry and infantry. The course of instruction is 18 months divided into 3 terms. The governor and commandant is a general officer appointed from the guards and line. (See Regulations respecting Examinations for admission to the R.M.C., War Office, 1892, price one penny; also the Standing Orders R.M.C.).

(iii) *The Staff College, Camberley, Surrey*, is for the higher education of officers to qualify them for the staff of the army. It accommodates 64 students. The course lasts two years; on passing the final examination an officer is entitled to the letters *p.s.c.* after his name, and is qualified for the staff. Before an officer can compete for the staff college his name must be on the list which is kept up in every battalion or regiment, showing the officers recommended by the commanding officer himself as eligible for the staff college;² he must be in every respect a good regimental officer of not

¹ See also chap. xviii.

² See Q.R., sect. ix., para. 4.

less than 5 years service and fulfil the requisite conditions which are laid down in regulations. The examination for entrance is competitive, a certain standard in mathematics, French or German, fortification, military topography, and tactics being obligatory. The course of instruction at the college is a severe and comprehensive one, both theoretical and practical, in all military subjects, modern languages, natural sciences, and riding. In the fourth term the students visit the schools of the engineers at Chatham and of the artillery at Shoeburyness ; a large amount of the work is outdoor execution of reconnaissance and survey, and schemes of various kinds connected with the attack and defence of positions, encampments, bivouacs, railway reconnaissances, staff duties, &c. On leaving the staff college each officer after being individually reported on by the commandant, who is assisted by the military professors, is attached to the different arms of the service at Aldershot or elsewhere, to obtain a knowledge of the working of other arms and of staff duties in the field. (See "Regulations for the Staff College" issued with Army Orders, 1 Nov., 1890, also Queen's Regulations, Sect. IX., Part II.).

(iv) *The Artillery College* is under the orders of the Deputy Adjutant-General, Royal Artillery, with the exception of the course of studies of the Senior Class of officers and the civilian Professors, who are under the Director-General of Military Education.

The College, formerly called the Department of Artillery Studies, was first established to enable officers of artillery to acquire technical knowledge special to artillery service and manufacture. Now, the Royal Navy, the Indian and Colonial Governments, and other Departments avail themselves of its resources in some branches of special instruction for their officers and others, while all arms of the service send artificers for training. The headquarters are situated in the Red Barracks, Woolwich.

The principal classes are the Senior Class, that for Firemasters,¹ for the Long Course, for Position-finders, for Gunnery Lieut., R.N., for Inspectors of Ordnance Machinery, for Ordnance Store Officers, for Master Gunners, and for Armourers, R.N.

250 artificers—viz., wheelers and carriage smiths, for all arms, and machinery gunners, are constantly under instruction in the workshops.

All details are to be found in a government publication, "The Artillery College"; to be had, on application, from the Director, Artillery College.

All officers passing the final examination of the Senior Class, Artillery College, have the letters "*p.a.c.*" after their names in the army and regimental lists ; other distinctive letters are used in the regimental lists to designate those officers who have passed in certain of the other courses.

(v) *The School of Military Engineering* at Chatham, besides being identified as to location with the headquarters and depôt of the Royal Engineers, is the centre of engineering instruction for the British army—viz., the regular army, the militia, volunteers, and Colonial forces, and, more especially, for the officers and men of the Royal Engineers.

¹ Properly called "Assistant Inspectors at out-stations," see "Inspection Staff," p. 436.

The staff of the school is composed of a commandant, assistant commandant, brigade major, and adjutant, with instructors and assistant instructors in the various subjects taught.

The instruction may be divided into three heads:--

- (a) The instruction of officers, Royal Engineers.
- (b) The instruction of men, Royal Engineers.
- (c) The instruction in engineering of the officers, non-commissioned officers, and men of the cavalry and infantry of the regular army and militia and volunteer engineers.

(a) Every officer of the corps, on receipt of his first commission, is sent to the school to be trained in military and engineering duties. The course is of about two years' duration, divided into two parts, the first of which *must* be completed before an officer leaves the school. The second portion of the course, consisting of the higher branches of each subject, may be completed before the officer is sent elsewhere, or may be postponed for two or three years according to circumstances.

The course consists of theoretical and practical instruction in military duties, fortification, construction, civil engineering and military sanitation, surveying, reconnaissance, and astronomy, military history and tactics, electricity, chemistry and photography, and also musketry. In addition to the first course, there is an advanced course for senior officers who are serving in India, and other senior officers are encouraged to return to the school in order to refresh their knowledge with the latest improvements.

(b) Every recruit, on joining at Chatham, on the completion of his recruit military course, if passed as efficient in military duties, goes through a one year's course of field and siege fortification and military bridging, and is also instructed in the use of explosives, in well sinking, hutting, &c. During the summer each company in turn goes into camp at Wouldham, a few miles from Chatham, where they receive instruction in all the duties connected with military bridging and with camp life. On the conclusion of the course, every recruit is carefully examined, and if he gives satisfaction, is rated as an efficient sapper. He is then eligible to be transferred, in his rating, to a service company, or is selected for further training in the *special schools* at Chatham. Men who enlist as telegraphers, photographers, printers, lithographers, or draughtsmen, usually go through a shorter course of field works, while those selected for submarine mining are generally passed on to the School of Submarine Mining, on the completion of drill and musketry.

The special schools are for instruction in surveying, building construction, engine-driving, electric-lighting, machinery, electricity, telegraphy, photography, printing, lithography, drawing, submarine mining, and diving.

There are also courses at the school for Royal Engineer non-commissioned officers, appointed as assistants to staff officers for instruction, and as volunteer instructors; also for non-commissioned officers of the mounted detachment, and for military foremen of works.

(c) This part of the work includes classes for cavalry and infantry officers, Royal Engineer militia and volunteer officers, cavalry and infantry pioneers, and non-commissioned officers and sappers of the Royal Engineer militia and volunteers.

The courses for each of the above include all the knowledge in field engineering and military bridging which might be of service in the conduct of a campaign.

(vi) *The School of Gunnery* at Shoeburyness, as its name implies, is for the instruction of officers, non-commissioned officers, and men of the Royal Artillery, in all matters pertaining to the science of gunnery. The commandant of the school, (a colonel on the staff, Royal Artillery), is also superintendent of experiments, and as such conducts for the Director of Artillery proofs and experiments with ordnance and ammunition of all kinds, also of all instruments and appliances in use by the Royal Artillery. The ranges are used for the instruction of classes and in some cases of field batteries. Long and short courses¹ of gunnery, some of the latter being open to officers of other arms of the service, are undergone here, there being a special instructional staff, under the commandant, of 5 chief instructors and 12 instructors, besides 8 officers in the experimental branch; all being officers of artillery. The school at the R. M. Repository, Woolwich, for instruction of militia and volunteer officers, and the non-commissioned officers of the permanent staff of those branches of the service, as also the artillery schools at Golden Hill, Devonport, and Sheerness, are branches of the School of Gunnery. (See standing orders of the School of Gunnery, 1890.)

(vii) *The School of Musketry* at Hythe is for the special training in musketry, including the use of machine guns, of officers, warrant officers, colour-sergeants and sergeants, to qualify them to instruct recruits and establish a thorough system of instruction throughout the army.

There are courses at the school of musketry for officers, warrant and non-commissioned officers of the regular forces, for officers of militia and volunteers, and for non-commissioned officers of the permanent staff of militia, yeomanry and volunteers, the dates of which are annually given in Army Orders for January. There are also two senior officers' courses in each year. Certificates—viz., the "extra certificate" and the "officer's certificate" are given to officers, on the conclusion of the course, in accordance with the results of the final examination. There is also a "warrant and non-commissioned officer's certificate." The school of musketry is under a commandant, who is a colonel, assisted by a chief instructor, two captain- and two lieutenant-instructors. (See the official manual of musketry instruction, 1892.)

(viii) *Gymnasia*.—In each large garrison there is a gymnasium under a superintendent, with a staff of non-commissioned officers as instructors. The supervision of these rests with the inspector of gymnasia at Aldershot. The superintendents are selected from those officers who have successfully passed the officers' gymnastic course at Aldershot. Non-commissioned officers are also trained at Aldershot for the post of instructor in gymnasia.

¹ The dates for holding these courses are not as yet periodically published but can be ascertained on reference to the Deputy Adjutant-General, Royal Artillery, War Office. The whole of the young officers on joining the Royal Artillery now receive practical instruction during a course at the School of Gunnery.

All young officers (not already qualified), and recruits have to go through a gymnastic course on joining their battalions. There are also courses of instruction for drilled soldiers, attendance for men under 30 years of age being compulsory; and there are frequent voluntary courses which are open to all ranks of all branches of the army; (See Queen's Regulations, Section X., and the Official "Gymnastic Exercises," price 2s).

(ix) *The School of Signalling* is at Aldershot and is under an inspector of signalling, who is a colonel, with an assistant inspector, who is a captain. Three classes are formed during the year, each of which consists of about 30 officers and 30 non-commissioned officers. The Queen's Regulations, Section VII., §§ 290-301, lay down the rules as to signalling in the army. Each unit of cavalry and infantry and each garrison artillery station with two or more companies has one officer as instructor, and two non-commissioned officers as assistant instructors; these hold certificates of proficiency from the school of signalling at Aldershot or from one of the three presidency schools in India. There is an annual inspection of the signallers of each unit at home by the inspector of signalling who decides the award of prizes. Abroad these inspections are conducted by selected qualified officers.

(x) *The School for Yeomanry and Volunteer Cavalry* is at Aldershot under a captain of cavalry as commandant. It is for the purpose of giving instruction to officers and the permanent staff of the yeomanry and volunteer cavalry. Ten officers form a class, which lasts a month or two months. Certificates of proficiency are issued, and on these certificates promotion to higher rank depends. Horses are found by the cavalry at Aldershot. (See Yeomanry Regulations, and Chapter XXIII. of this book.)

(xi) *The Army Medical School* is at Netley and is governed by its own senate, consisting of the director-general, army medical department, as president, the physician to the Council of India, the professors of the school, and the principal medical officer of the Royal Victoria Hospital (Netley) *ex officio*. The rules governing the school are to be found in the "Regulations for the Army Medical School, Netley," a government publication.

The object of the school is for the training of gentlemen appointed as surgeons on probation to the army medical staff. Courses of lectures and practical instruction on hygiene, and on all specialities of military medical service, are held. There is a staff of four professors and four assistant professors all of whom are officers on full or retired pay of the army medical staff, or Indian medical service.

(xii) *The Army Veterinary School* is at Aldershot and is under a committee of which the general officer commanding at Aldershot is president and the inspector-general of cavalry, the general officer commanding cavalry brigade at Aldershot, the general officer commanding the artillery, the assistant adjutant-generals and district veterinary officer at Aldershot are the members. Classes are held at the school (1) for 40 officers of the mounted branches of the army at home (including 6 of the Indian army); (2) for veterinary surgeons and veterinary surgeons on probation; (3) for farriers and shoeing smiths and others. The staff consists of one professor and one assistant professor, both officers of the army veterinary department. The

army vaccine institute is attached to the school and is under the management of the professor. It is for the purpose of cultivating calf lymph for the army, and issues annually sufficient lymph to vaccinate 40,000 persons. (See regulations, to be obtained from the school at Aldershot).

(xiii) *The Royal Military School of Music* is at Kneller Hall near Hounslow, and is under a colonel as commandant, with an officer as adjutant, and a quartermaster. There is also a director of music and two acting chaplains, two army schoolmasters, and ten professional gentlemen as instructors in the several instruments. Those under instruction are divided into "students" and "pupils." The former are band-sergeants and other non-commissioned officers who have been sent to qualify for the position of band-masters; the latter are men and boys sent to be trained as musicians for their respective bands. There is a course of instruction for each of these classes. Twice annually independent examiners conduct examinations of the students, who study for two or three years, and certificates are issued. The course for pupils lasts 12 to 18 months. Further information can be obtained from the school.

(xiv) *Army Schools* are established for educating non-commissioned officers, soldiers, and their children. They are under the director-general of military education, there being a colonel as director of army schools who has the general supervision and direction of the department. There are 23 inspectors of army schools who are stationed at various stations in the United Kingdom and the Colonies. On promotion they rank as lieutenants, and after 10 years commissioned service, as captains. They are under the general officers commanding districts, and in India under the commanders-in-chief of presidencies. (See Army School Regulations.)

(xv) *The Duke of York's Royal Military School* was originally called the Royal Military Asylum. It is at Chelsea and is managed by a body of commissioners under the presidency of the Secretary of State for War and the vice-presidency of the Commander-in-Chief. There are 12 other *ex-officio* presidents and 7 specially appointed. The school is under a commandant, with an adjutant and quartermaster, medical officer, chaplain, a head master who is an inspector of army schools, and 4 army schoolmasters. The school, which was established by H.R.H. the late Duke of York, then commander-in-chief, is for the education, free of charge, of sons of warrant officers, non-commissioned officers, and soldiers of the army, preference being given to orphans, and those whose fathers have been killed or died in service abroad.¹ The school accommodates 550 boys, who are clothed, fed, and educated at state expense. These boys are, if fit and willing to serve, placed in the army after attaining 14 years of age; those who are unfit are either apprenticed, placed in service, or handed over to their friends.

(xvi) *The Royal Hibernian Military School* is situated in the Phoenix Park, Dublin, and is an institution very similar to the Duke of York's school the conditions of entrance are the same, and it has a similar staff.

¹ Boys' names can be registered between the ages of 8 and 11 but cannot be considered until they reach the age of 9. A certain educational test is necessary before a boy can be admitted.

CAMPS OF EXERCISE.

As schools of instruction and educational establishments are necessary for the elementary and more theoretical part of the military training of officers and men of the army, so are camps of exercise essential for the purposes of applying and of perfecting by practice what has been thus learnt.

The chief properties which such camps of exercise should possess are (1) extent and suitability of the ground available; (2) convenience of access; (3) water supply, and the other essentials which characterize a good camp.

As regards (1), when we consider the distance over which troops covering the advance of a division would extend, and the necessity that the opposing forces should have ample space between them to admit of their observing as far as possible service conditions in feeling for each other, and making the needful dispositions for attack and defence, the minimum length of available manœuvring ground ought hardly to be less than 4 or 5 miles, with some 2 or 3 miles in width. It is difficult to obtain in a highly cultivated and enclosed country like England, any such extent of waste ground, and Aldershot affords the only example we have of an even fairly suitable manœuvring ground. In addition to extent, the ground should be well accentuated and not a purely level plain. In India, of course, far more favourable conditions offer themselves, and admirable localities can be, with little difficulty, selected, and obtained for camps of exercise. The other two conditions—viz., means of access, and good hygienic conditions are in this country comparatively easy to obtain.

For practice camps for artillery the selection is even smaller, and recourse must of necessity be had to thinly populated moorland, such as Dartmoor, where long ranges, with

little danger of damage to life or property, can reasonably be ensured. This is a subject on which much might be written but for the purpose of this book it must suffice to point out the great difficulty of obtaining, without serious expense, the land necessary for manœuvring troops on a moderately large scale, or for practising with field artillery under service conditions.

(i) *Aldershot*.—This, our largest, and by far most important, military camp, constitutes a military district of itself called “the Aldershot Division.” The normal force at the station consists of three cavalry regiments; 3 batteries of horse and 6 of field artillery; the field depôt, bridging and telegraph battalions, 4 field companies and balloon depôt Royal Engineers; 11 battalions of infantry; 13 companies Army Service Corps; 3 companies and 2 depôts Medical Staff Corps; a company Ordnance Store Corps; and the mounted and foot military police—all under the command of a lieutenant-general, assisted by a suitable staff.

Aldershot may be called the great school of training for the army at home in all field exercises, and every summer, for the purpose of more extended manœuvres, the division is largely reinforced by troops of all arms from other stations. The Aldershot division itself, as a general rule, comprises those regiments and corps which are first on the list for foreign service, by which means foreign stations may be relieved and any expeditionary force supplied with troops thoroughly exercised up to the most modern military standard. The troops stationed at Aldershot are accommodated in barracks; those sent for the drill season only are generally placed under canvas.

(ii) *Shorncliffe Camp* in Kent forms a brigadier-general’s command under the general officer commanding south-eastern district. The troops stationed here comprise 2 cavalry regiments; 3 field batteries; 1 field company of engineers; 1 battalion of infantry; and 2 companies Army Service Corps; besides the provisional battalion of infantry which is stationed here. The troops are accommodated in huts. The area is very limited.

(iii) *The Curragh*.—What Aldershot is to England, the Curragh is, on a smaller scale, to the troops quartered in Ireland. It is similarly constituted to the Aldershot command, that is to say, it forms one of the military districts of the United Kingdom, and is under the command of a major-general. The troops permanently quartered there consist of 1 regiment of cavalry; 2 batteries of horse artillery; 2 field companies of engineers; 3 infantry battalions; 4 companies of the Army Service and one of the Medical Staff Corps. During the summer, special drills and manœuvres are carried on within the district, which are participated in by troops from other parts of the country, but the area is very limited.

(iv) *Strensall Common*, near York, is a camp where corps stationed in the north-eastern district assemble in the summer for combined field movements, &c. The area is only sufficient for manœuvres on a small scale, and the ground is generally flat.

(v) *Royal Artillery practice camps.*—There are four principal localities where batteries and companies of the Royal Artillery are assembled annually for gun practice and for such extended artillery exercises as the ground admits in the several localities. They are :—

1. Okehampton—for horse and field artillery—also Morecambe Bay.
2. Glenbeigh—for horse and field artillery in Ireland.
3. Hay—for mountain artillery.
4. Lydd—for siege artillery.
5. Isle of Wight (western forts) and Devonport—for garrison artillery.

Practice takes place during the summer months, the dates being laid down in Royal Artillery regimental orders. Full instructions for practice are printed, and are to be obtained from the D.A.G., Royal Artillery, Horse Guards, War Office.

1. *Okehampton.*—This camp is situated on Dartmoor, near the town of Okehampton, and embraces a large extent of moorland much accentuated and well adapted for horse and field artillery practice at long ranges. The camp during the practice season is under the command of a colonel of artillery, who is one of the chief instructors of the School of Gunnery, and associate member of the ordnance committee for field artillery questions. A succession of batteries relieve each other at Okehampton by brigade-divisions, each of which is commanded by a lieutenant-colonel. Courses of field gunnery for officers of artillery and other arms are frequent during the season. The ground is held on lease. At *Morecambe Bay* in Lancashire, five batteries practice annually over the sands.
2. *Glenbeigh.*—This camp is situated in county Kerry near the sea, and accommodates the batteries of horse and field artillery stationed in Ireland. It is under the command of the colonel on the staff commanding Royal Artillery at the Curragh. The ground, which is held on lease, is not by any means up to the real requirements of a practice ground for field artillery, but was chosen as the best that could be found at the time.
3. *Hay* is in Monmouthshire, and is now only used for the annual practice of the battery of mountain artillery which is stationed at Newport, Mon. The firing rights are held by lease.
4. *Lydd*, near Dungeness, Kent.—Companies of Garrison Artillery are here practised with siege guns, and other operations both of artillery work and experimental practice are carried out. The camp is under the command of a colonel of artillery, a chief instructor of the School of Gunnery, who is in command of the Royal Military Repository at Woolwich, and whose duties lie in connection with garrison and siege artillery work. Courses of instruction for officers of artillery, and of other arms, in garrison and siege artillery work are carried on here during the practice. The extensive ranges have been acquired by purchase, and are used for the musketry instruction of infantry, as well as by the artillery.
5. At the *Isle of Wight* and *Devonport* companies and classes have coast defence practice from the forts.

(vi) *Woolham*.—A camp near Chatham used by the Royal Engineers for bridging operations. (See School of Military Engineering, p. 423).

(vii) *The National Rifle Association* (12, Pall Mall East, S.W.), was founded in 1860, its object being "to give permanence to volunteer corps and to encourage rifle shooting throughout the Queen's dominions." It was incorporated by Royal Charter in 1890; H.R.H. the Prince of Wales is patron, and H.R.H. the Duke of Cambridge is president. There are a number of vice-presidents and a council. The association holds an annual rifle meeting on Bisley Common, which is situated near Brookwood Station, on the L. and S. W. Railway. This meeting, which lasts nearly a fortnight, is conducted under the direction of a Bisley Committee nominated by the council, with special powers. A large number of competitions for prizes take place at the meeting, the principal of which is the Queen's Prize, which is for volunteers only. Many competitions are open to the army, navy, marines, militia and yeomanry as well as to the volunteers, and also to the Indian and Colonial troops. Certain entrance fees are exacted which go to the funds of the association for the purchase of prizes, expenses of the meeting, &c. In 1891, the value of prizes competed for at the meeting held in that year amounted to over £12,000, of which the N.R.A. gave over £10,000.

The government provides a large quantity, some 400,000 rounds, of the ammunition used, to the value of about £2,000.

(viii) *The National Artillery Association* has its head office at 24, Bedford Street, Covent Garden. It was founded in 1861, and has for object "the advancement and promotion of the service and practice of artillery, primarily amongst volunteers in the United Kingdom; and especially the formation of an annual camp of instruction and prize meeting for artillery volunteers." Her Majesty the Queen and H.R.H. the Prince of Wales are patrons, and H.R.H. the Duke of Cambridge is president.

The affairs of the Association are managed by a council composed of artillery officers, regular, militia, and volunteers, with a certain number of *ex officio* members in addition. The association is supported by the voluntary adhesion of members, chiefly volunteers of all ranks who pay a subscription; it also receives government assistance in the shape of ammunition for practice and of a capitation grant for each officer, non-commissioned officer, and gunner, who attends the camp, under certain regulations which are laid down and are to be found in the book of instructions published yearly by the association. The annual meeting takes place early in August at Shoeburyness, and the camp is under the command of the R.A. officer commanding the companies at the station, with a staff of Volunteer officers, and is directed under strict military conditions. Prizes to the value of over £1,000 are annually competed for, including a prize presented by the association for competition between detachments of the Royal Artillery. The friendly emulation and keen interest evinced in these contests exercise a very beneficial effect on those taking part in them and is of undoubted value to the state. The gun ammunition provided by the government for 1893 was worth about £2,800.

(ix) *The Scottish National Artillery Association* was established in 1888,

under authority from the War Office, with the same objects in view as the National Artillery Association, but with special reference to the convenience of the artillery corps in Scotland. The site of the camp and ranges, which were purchased by the Government in 1892, is at Barry Links at the mouth of the River Tay, about eight miles from Dundee. There are several rifle as well as artillery ranges, and also a practice battery for the Naval Artillery Volunteers. The artillery range is a land one of about 4,000 yards, having the open sea beyond the targets. There is also a sea range. The artillery camp is held annually in the latter part of July, and is commanded by a lieutenant-colonel of Royal Artillery, who is assisted by a staff of officers of the regular and volunteer artillery.

The first camp of the association was held in July 1884, at Barry Links, and was attended by 113 detachments, including some from corps in the north of England. The average annual numbers which attended the camp between the years 1885 and 1892 inclusive were 43 officers, and 1,040 non-commissioned officers and men, constituting 109 detachments.

The funds of the association are made up of (1) the government grant, (2) subscriptions, entry money, and other payments by those attending the camps, and (3) subscriptions from patrons, certain public bodies, and private individuals. Her Majesty the Queen presents a cup annually, the first competition for which takes place July, 1893.

The liberal allowance of ammunition now granted by government, amounting to over £2,000 for 1893, permits of instructional as well as competitive practice.

(x) *Musketry Camps*.—There are also many camps which are occupied in the season as musketry camps; one of the chief being Altcar, near Liverpool, where firing rights are hired and where some militia battalions do their training as well as their musketry practice. Fleetwood and Chipping in Lancashire are other examples of these camps. Barry Links is also used as a camp for general purposes.

ORDNANCE FACTORIES.

These Factories,¹ under the control of the Director-General of Ordnance Factories, consist of six separate establishments, viz :—

1. Royal Laboratory	..	..	..	} In Woolwich Arsenal.
2. Royal Gun Factory	..	..	..
3. Royal Carriage Department	..	..	..
4. Royal Gunpowder Factory	..	..	..	Waltham Abbey.
5. Royal Small Arms Factory	..	..	..	Enfield.
6. Royal Small Arms Factory	..	..	..	Birmingham.

With the exception of the last two, these factories have existed, though on a small scale, from distant times. It is difficult to fix the precise period at which they respectively started, but the Laboratory was at work in 1746, for the purpose, as is quaintly said, of "making fireworks for real use." By 1810 it had attained to a strength of 1,336 artificers and labourers; and, bear-

¹ See chap. xxiv.

ing in mind the later developments, it is rather grotesque to find a select committee in 1811 recommending that, as motive power, a steam engine should be substituted for gangs of horses and men. At present the Royal Laboratory makes a large proportion of every sort of ammunition and projectile used by the army and navy.

Until Crimean days, iron ordnance was procured by contract, the Carron ironworks in Scotland being among the largest producers; but brass guns were always made in the Brass Gun Foundry at Woolwich. That foundry no longer makes brass guns, but has expanded into the vast iron and steel gun factories which now cover many acres at Woolwich. The increase in the size of ordnance, and the constant re-armaments of the last 35 years—more especially the introduction in 1859 of the Armstrong gun—led to the extraordinary development of the gun factories.

The Royal Carriage Department was formed in the 18th century for the manufacture of gun carriages and army vehicles. Though enormously developed in extent, the same work is still performed for the army and navy.

In early times there were Government powder mills at Faversham, which still existed during the great French war.

The powder factory at Waltham Abbey was started in 1788; and it is reported by a parliamentary committee that up to 1799 there had been expended on land and buildings £45,685, with a resulting saving of £79,454 in *the cost* of gunpowder.

The Small Arms Factory is a comparatively recent creation. Up to 1854 all small arms were obtained by contract; but the introduction, first of the Minié rifle, and, shortly after, of the Enfield rifle, as the military arm, involved more rapid supply than the private trade of the country could effect. Accordingly, Government purchased ground and buildings near Enfield Lock, and established the Royal Small Arms Factory; which, by great subsequent extensions, has successively supplied a large part of the forces of the empire with Enfield rifles, Snider breechloaders, Martini-Henry rifles, and lastly, the present magazine rifles. The factory also produces machine guns, carbines, pistols, bayonets, swords, &c.

The Small Arms Factory at Sparkbrook, Birmingham, is an acquisition made a few years ago of the shops in going order of a large small arms manufacturing company. From its position in the Midlands it is believed that it can work a trifle more cheaply than Enfield.

The maintenance of these Government factories has always been a matter of high dispute in and out of Parliament. Their opponents urge that demand will always create the means of supply, that the Government requirements would foster trade, and that prices would be kept down by competition among producers. The Government argument is that private trade cannot be relied upon in times of emergency, that such things happen as prices being kept up by "rings" formed among the traders, and lastly, that the Government factories furnish a criterion of price as well as a standard of workmanship. The wisest course is a mean between the Government factories and the private trade; each checks the other, and there is plenty of room left for the development of trade. The wish of the War Department is that no trade which makes arms should die out or be too severely handicapped; and, in

round numbers, about two-thirds of the supplies required are called for from the trade. The actual division of the orders rests with the Director of Army Contracts, to whom all applications for warlike stores are made, whether for the army, navy, India, or the Colonies.

The several factories grew little by little to their present great dimensions, which enable them, in times of pressure, to employ some 15,000 men.¹ Originally they were independent establishments, each under its superintendent, and all responsible to the Board of Ordnance. When that body ceased to exist, the factories came under the Director of Stores (known later as the Director of Artillery). That functionary having as much as he could manage in maintaining and distributing supplies of warlike stores, it was decided in 1887, on the recommendation of a powerful committee, of which the Earl of Morley was chairman, to place them under one immediate management, and a Director-General of Ordnance Factories was appointed. At the same time was enunciated the principle that the factories should be worked on a strictly "commercial basis." This means that for every article made a price should be charged which would cover material, labour, superintendence, and depreciation, with any other expenses involved in the manufacture. This price would be paid by the department requiring the store, whether the War Office or the Admiralty, the India Office or a Colonial Government. Another reform introduced was the separation of inspection from manufacture. "Under the arrangements at present in force at the War Office, the pattern of all weapons in use in the army is settled by soldiers, and it is for soldiers to say, after manufacture, whether the weapons turned out satisfy their requirements."² A vote for the factories is submitted to Parliament for merely a nominal amount, £10 or £100, with the object of bringing the expenditure within the ken of the Comptroller and Auditor-General.

The Ordnance Factories, as a whole, are governed by the director-general, who has three assistants, and a staff of clerks. Each factory has a superintendent³ and a manager. Formerly all the officers were from the Royal Artillery, but that rule has been abrogated, and the superintendents are now

¹ The workmen employed on three recent dates were as follows (omitting gunpowder factory):—

Factory.	25 March, 1886.	29 February, 1888.	28 February, 1890.
Laboratory	5,924	6,691	6,888
Gun	1,923	2,043	2,648
Carriage.. ..	2,284	2,107	2,573
Small Arms	2,259	2,019	3,297
Total	12,390	12,860	14,901

² "The British Army, 1892," p. 94.

³ In the Royal Laboratory and Royal Gunpowder Factory there are military officers entitled "in charge of danger buildings." They are assistants to the superintendent.

obtained from any service which will produce suitable men, or from civil life. At present the director-general is a civilian; he has a naval assistant and also a civilian one. The superintendent at Enfield is a civilian; the others have been taken from the artillery, engineers, and navy. Besides the superintendents of the factories proper, there is a superintendent of building works, an officer of Royal Engineers, whose function it is to erect and keep in repair the numerous buildings and workshops concerned.

ARMY CLOTHING DEPARTMENT.

This department, established in 1855, is the medium through which all clothing and necessaries reach the army and militia. Clothing in a military sense does not include underclothes, which are comprised in "necessaries."

Formerly the Board of Ordnance obtained clothing for the artillery and the sappers and miners by contract.

The colonels of regiments of cavalry and infantry were virtually the contractors for their regiments from the time those regiments were formed, and it was an understood rule that out of the annual sum of about £2,150 voted for clothing a corps, the colonel should make a profit of from £500 to £600. In 1850 a select committee of the House of Commons proposed the substitution of a direct payment for this profit derived by the colonel from clothing; as, while admitting that the system had worked well, the committee considered it objectionable that money voted ostensibly for clothing should be expended as pay. This resulted in the addition of a fixed sum of £500 to the pay of the colonel of the regiment, and the supply of the regimental clothing by the Government.

The department includes three distinct divisions—(1), the army clothing depôt, in which are stored the made garments, boots, &c., for issue and reserve wherever they may have been made; (2), the clothing inspection service in which all articles supplied by contract are rigorously inspected; (3), the army clothing factory, where uniform clothing is made in vast quantities by a posse of women mostly employed on sewing machines.

The whole department is governed by the Director of Clothing and his assistant, located since 1870, at the Army Clothing Depôt at Pimlico, which itself, with the Clothing Factory, was erected in 1863.

Apart from its immediate duties towards the army and militia, the department inspects and buys cloth (on repayment) for the volunteers. It also manages supplies of uniform for the post office, and some other services.

VARIOUS COMMITTEES, ESTABLISHMENTS, &c.

(i) *Ordnance Committee.*—This is a committee composed of naval and military officers and civilians, who consider and report upon such questions as may be referred to them by order of the Secretary of State for War.

The subjects dealt with may be generally described as the construction of ordnance of all kinds ; machine guns, carriages, mountings, projectiles, ammunition and stores, and all inventions and improvements connected therewith ; also all appliances, &c., which are required for the efficient working of ordnance. The committee is held directly responsible for the designs of all guns in H.M.'s service, except in special cases.

The constitution of the committee is—

President—A general officer R.A.

Vice-President—An officer R.N.

Members—2 officers R.N. ; 2 officers R.A. ; 1 officer R.E. ; the ordnance consulting officer for India, *ex officio*, and 2 Civil Engineers.

Secretary—An officer R.A.

Assistant Secretary—An officer R.N.

There are in addition nine associate members for special subjects.

All instructions to the committee are conveyed through the Director of Artillery. The committee has its headquarters at Woolwich.

Similar functions to the above were performed by committees under various appellations from an early date in the century, and notably by the "Ordnance Select Committee," from 1859 to 1868, when it was dissolved. The growing complexity of the abstruse problems connected with the construction of ordnance, and the difficulty of dealing with them, and with inventions, through the agency of the numerous committees which, working under the Director of Artillery, had been called into being since the dissolution of the Ordnance Select Committee, led to the constitution of the ordnance committee by Mr. Childers in 1881.

(ii) *Inspection Staff*.—Under the department of the Director of Artillery there is an establishment of officers and others for the inspection of warlike stores.

It may be divided broadly into four branches :—

- (a) *Inspectors*, as enumerated in the Army List under "*Inspection Staff*."—These are officers having special qualifications, who are employed in examining the material and workmanship of guns and stores, whether produced in the ordnance factories or by contract. The examination is conducted during manufacture, as well as on delivery,¹ according to the requirements of the service. In regard to small arms it extends to periodical inspection of arms in the hands of all troops at home.
- (b) *Civilian inspectors* under the *Superintendent of Inspectors of "General Stores"*.—These are men possessing special knowledge in regard to the particular classes of articles with which they respectively deal. They examine harness and saddlery, accoutrements, and articles of camp, barrack and hospital equipment, the whole of which are usually supplied by contract.
- (c) *Assistant Inspectors at out-stations*.—These were formerly called Firemasters, or Inspectors of Warlike Stores. Their duties are to examine ordnance, explosives, and artillery material generally, in

¹ See "Ordnance Factories" for introduction of system of inspection.

store, or in possession of the Royal Artillery, with regard to their continued serviceability.

- (d) *Inspectors of Position Finding*, whose duties consist in the inspection of position-finding apparatus, its custody and care, and instruction in its use.

In addition to the above there is, at Woolwich, an inspecting officer of Royal Engineers, under the I.G.F., whose duties are to examine stores special to engineer equipment, surveying and mathematical instruments, &c.

(iii) *Indian Valuation Committee*.—The Indian Valuation Committee consists of two officers, one acting on behalf of the Indian Government, the other on the part of the War Office. Indian Finance being distinct from Home Finance an adjustment is necessary, on the transfer of troops from one Government to the other, with regard to the arms, equipment and clothing which the troops take with them, and a valuation thereof has to be taken.

The amounts of these valuations are very variable. A regiment embarks for India with a new equipment, worth £7,000 or £8,000 (dependent upon its strength). A regiment returns from India having been through two or three campaigns, and its equipment may be only worth £200 or less.

The process of valuation is, that each article is assigned a *life*. A Lee-Metford rifle, say, has a life of 12 years; then, if serviceable, its value is, full price, £5 5s. 5d., or $\frac{1}{12}$, $\frac{2}{12}$, $\frac{11}{12}$, &c., according to its date of issue. See Equipment Regulations, Appendix II.

(iv) *The Army Sanitary Committee* is under the presidency of the Quartermaster-General to the Forces, and is composed of seven members with a secretary. The members include 1 engineer officer, 1 retired engineer officer, and 5 medical gentlemen (military and civil). The committee reports upon sites for new barracks and hospitals, on plans for the same, and on all sanitary questions connected therewith. It visits existing barracks when necessary and reports thereon. It also deals with sanitary reports from home, Indian, and colonial stations, and on other matters, all of which are laid down in a War Office circular issued for its guidance.

The work done by the above committee was, it appears, first undertaken in 1857 by the "Barrack and Hospital Improvement Commission," of which Mr. Sidney Herbert was president. This commission received a large accession of members in 1862, and the Quartermaster-General of the Army was made its *ex officio* president. In 1866 it was given its present title, but its activity as a committee appears to have ceased until its reconstitution, in June, 1890, by Mr. Stanhope, Secretary of State.

(v) *The Royal Engineer Committee* dates from 1782, but was reconstituted in 1869. This permanent War Office Committee works immediately under the Inspector-General of Fortifications and Royal Engineers. It is composed of engineer officers, some of whom serve *ex officio* while holding certain appointments at headquarters at Chatham and elsewhere: in every case employment on the committee is in addition to ordinary duties. The president is the Commandant, School of Military Engineering, Chatham. This committee deals with matters relating to the equipment of the Royal

Engineers, and also with such questions as may, when necessary, be referred to it in connection with the technical equipment of the army at large, or inventions bearing on the same.

(vi) *The Dress and Equipment Committee* at Aldershot, instituted in 1883, consists of representatives of the different arms and departments of the service, nominated by, and working under the general officer commanding Aldershot division. Its duties are to consider such questions affecting the dress and personal equipment of the army, as may be submitted to it by order of the Commander-in-Chief.

(vii) *The Army Purchase Commission* was appointed in 1871, on the abolition of purchase in the army, in order to adjust the claims of those officers who had purchased their commissions. Its labours are now nearly at an end. There are two commissioners—viz., the Deputy Judge Advocate General, and the Deputy Judge Advocate.

(viii) *The Military Prison Department* has its offices at the Home Office, Whitehall. It is under the Inspector-General of Military Prisons. He is assisted by two inspectors, who have under them the Governor of Gosport Prison,¹ and the chief warders in charge of the various military prisons at home and in the colonies (but not in India). The "Rules for military prisons" made under the Army Discipline and Regulation Act, 1879, are published: the latest edition is that dated November, 1889.

(ix) *The Tower of London*.—"Her Majesty's Royal Palace and Fortress of the Tower of London" has from time immemorial had certain privileges attached to it. The *Constable*, who is always a distinguished general officer of the army, holds his appointment by Royal Letters Patent, and is honoured with the privilege of audience of, and direct communication with, the Sovereign. The *Lieutenant* is similarly appointed to act under the Constable, and acts for him with the full privileges and power of the Constable in the absence of the latter. The *major*, *chaplain*, and *medical officer* are appointed by commission. The government of the Tower as a fortress is carried on by the Constable under the orders of the Commander-in-Chief. "Her Majesty's Regulations for the Tower of London," published by Royal command, contain further information on this subject.

(x) *The Royal Hospital, Chelsea*, built on the site of the Theological College of James I., subsequently demolished, was founded by Charles II., in 1682, as an asylum for wounded and superannuated soldiers, to be supported by contributions derived by deductions from the pay of the army.

The institution is directed by a body of *ex officio* Commissioners. Its administration, as well as the investigation of all claims to pension from the warrant officers, non-commissioned officers, and soldiers of the whole army, is vested solely in the Commissioners, who are appointed by Letters Patent.

The governorship is conferred on field-marshal or retired general officers. The staff consists of a lieutenant-governor and secretary, three medical officers, a chaplain, adjutant, quartermaster, and six captains of invalids. There is also a civil establishment almost wholly engaged in the investigation of claims to out-pensions.

¹ The only military prison in charge of a Governor.

There is accommodation for 538 in-pensioners, who are clothed and boarded at the expense of the State, the qualifications being :—

Good character; preference being given at all times to those who have borne the best characters and rendered the longest service, and who are shown to be :—

(a) Incapable of supplementing their pensions by their own exertions, owing to the loss of a limb, wounds, or other injuries or disabilities resulting from army service.

(b) Incapable from other causes, provided that they are not under 55 years of age, and are in receipt of a permanent pension.

(c) Free from responsibility for support of wife or child.

Out-pension ceases on admission, very small allowances of money being made to in-pensioners.

Applications are made to the Secretary, Royal Hospital, Chelsea, S.W.

(xi) *The Royal Hospital, Kilmainham, Dublin*, is a similar establishment to that at Chelsea, and was also founded by Charles II. through the exertions of the then Viceroy of Ireland, the great Duke of Ormond. The number of pensioners provided for in the hospital is 140. The institution is managed under the Commissioners of the Royal Hospital, Chelsea, by a master (the general officer commanding the forces in Ireland), with two joint deputy masters (senior staff officers of the headquarters staff, Ireland), a secretary, medical officer, adjutant, quartermaster, and one captain of invalids.

The conditions for entrance are similar to those for the Royal Hospital, Chelsea.¹

(xii) *The Ordnance Survey Department*.²—The Ordnance Survey derives its title from the fact that until 1870, when it was transferred to the Office of Works, it was carried out under the Board of Ordnance. In 1890 it was transferred to the Board of Agriculture.

A trigonometrical survey for the purpose of producing a military map of Great Britain was ordered in 1791; but it was not until 1797 that the production of a general military map of the kingdom, founded on a minute survey, was approved. This map was published on a scale of 1 inch to a mile.

Major-General Roy, Royal Engineers, who commenced the survey, placed its organization on a military basis, which it has ever since retained. The detail plans were commenced by Royal Engineer officers, and when owing to the war they became too much engaged, a corps of Royal Military Surveyors and Draughtsmen was formed for home and foreign service. To expedite the progress of the military map, civilian surveyors were engaged, and some portions of the country were surveyed by contract.

On the close of the war in 1815, the desire for the map, as a military map, ceased, and its progress became very slow.

In 1824 a survey of Ireland on a scale of 6 inches to a mile was ordered,

¹ An interesting account of the Royal Hospital is to be found in the "Guide to the Royal Hospital, Dublin," by Lieutenant-Colonel Childers, Royal Engineers, and Robert Stewart. Price 6d.

² See chap. xiii.

and in 1840, Scotland and the six northern counties of England were ordered to be surveyed on the same scale. The scales now in use were ordered on the 18th May, 1855. They are—

1. $\frac{1}{12672}$ or 126·72 inches to a mile for the plans of all towns with more than 4,000 inhabitants.
2. $\frac{1}{25344}$ or 25·344 inches to a mile for the plans of all cultivated districts.
3. $\frac{1}{6}$ or 6 inches to a mile for the United Kingdom.
4. $\frac{1}{63360}$ or 1 inch to a mile for the United Kingdom.

Subsequently the preparation of maps of the United Kingdom on a scale of 4 miles to an inch, and 10 miles to an inch were authorized. The 1-inch map, which constitutes the general military map of the kingdom, is published in two forms, in outline with contours, and with the hill features represented by vertical hachures.

The ordnance survey is carried out under the direction of the President of the Board of Agriculture by 24 officers of Royal Engineers; 4 companies, Royal Engineers, which were specially raised in 1824, 1825, and 1848, for service on the survey; 1,600 civilian assistants; and 440 labourers.

In addition to the conduct of all surveys on the larger scales, for civil purposes, and the publication of the plans derived therefrom, the ordnance survey department is responsible for the production and revision of the military map of the kingdom on the 1-inch scale; for the execution of special surveys for defence purposes; for the preparation of maps for peace manœuvres, and for War Department purposes; and for the production of copies of maps and plans for the Intelligence Division of the War Office. It is also responsible for the proper conduct of such surveys as may be necessary during a campaign, and is directed to maintain three survey sections, each consisting of 1 officer and 6 non-commissioned officers and men, complete with instruments and survey stores, in readiness for service with an army in the field.¹ The department has also to provide men for special surveys beyond the limits of the kingdom when required to do so by the Government.

(xiii) *The Honourable Corps of Gentlemen-at-Arms*.—In 1509, Henry VIII. incorporated a body of 50 “cadets of noble families” to form a military mounted body guard to his person. They were styled the King’s “Pensioners and Spears,” and history records many cases in which they have done good service. Charles II. reduced the number to 40. The chief revivals of the body took place in the reigns of James II. and George II. The title of gentlemen-pensioners was changed by William IV. to that they now bear, and at the coronation of Queen Victoria they adopted their present uniform. When on duty they carry a halberd. Previous to 1861, on which date the corps was reorganized by Her Majesty, commissions in the corps were purchased, but by the new regulations such purchase was abolished. The corps now consists of 40 gentlemen with a captain, always a peer; a lieutenant, who must be or have been a colonel or lieutenant-colonel in the army; a standard-bearer, a clerk of the cheque, and a harbinger, who must be or have been lieu-

¹ See chap. xxxi. (end).

tenant-colonels. The private gentlemen must have been majors or captains in the army or Royal Marines.¹ The Gentlemen-at-Arms attend the Sovereign on all court or state occasions.² To join this corps an officer must have seen active service in the field and have a decoration. The corps is under the Lord Chamberlain, and the pay is provided for in the civil list.

(xiv) *The Royal Body Guard of the Yeomen of the Guard* is a very ancient body. The present corps was formally incorporated by Henry VII. in 1485. In the reign of Henry VIII. there were 200 of them, half of whom were mounted. They acquired their name of *Beef-eaters*³ in that reign and were in great favour during the reigns of Edward VI., Mary and Elizabeth. At the Restoration their number was reduced to 100, which is the present establishment. As with the Gentlemen-at-Arms, this corps was re-organized in 1861, purchase of officers' commissions abolished, and future vacancies directed to be given to officers of the army of long and good service. The captain is always a peer, and goes out with each Ministry; the lieutenant must be or have been a colonel or lieutenant-colonel in the army; the ensign and clerk of the cheque, lieutenant-colonels or majors; the exons or exempts, captains; and the privates, non-commissioned officers not below the rank of sergeant. The "Yeomen Warders of the Tower," appointed by the Constable, forty in number, are recruited from the retired non-commissioned officers of the army, and are commanded by the Lieutenant of the Tower. They are "honorary" members of the Yeomen of the Guard. They and the Yeomen of the Guard carry a partizan and wear a picturesque Tudor costume of scarlet.

(xv) *The Royal Company of Archers of Scotland* was incorporated in 1677. After the Revolution, it seems, the archers lay dormant until revived by Queen Anne. In 1788 we hear of them as taking part in a public shooting match for a prize given by George III. The claim of the company to be the body-guard of the Sovereign in Scotland was allowed on the occasion of the visit of George IV. to Scotland, and they continue to enjoy that privilege. The court dress is of green with gold embroidery and epaulettes, a cocked hat with plume of cock's feathers, and a sword. The "shooting" dress is a green tunic with crimson facings, green trousers, and a Highland cap with eagle's feather. The company numbers over 500, and comprises members of the nobility, gentry, and professional men of Scotland. The captain-general, who is always a peer, is gold stick for Scotland.⁴

¹ See Clode, vol. i., p. 359.

² For further particulars and details regarding the three body-guards of the Sovereign, see "The Nearest Guard," by Brackenbury, and "Her Majesty's Army," by Richards.

³ *Buffetiers*, originally attendants upon the King's *buffet*. Other derivations have been suggested.

⁴ See "The British Army," by Sir S. D. Scott, Bart., vol. ii., p. 150.

PART III.

THE ARMY IN INDIA AND COLONIAL FORCES.

CHAPTER XXVI.

THE ARMY IN INDIA.

1. *Introductory.*

Geographical and Ethnological. — India—the country to which the destiny of so many of our sons leads them—is as a sealed book to those who have not visited it, owing to the great difference existing between its institutions and those of any other part of the world, and at the same time, to the difficulty of conveying any adequate description of its physical and social aspect, arising, partly, from the diversity of man and of nature observable in its many provinces.

The best advice to be given to those who would open this sealed book is that they should do so on the spot. Many of our readers will be able to follow this advice; but in the meantime a sketch of what they may expect to find, such as can be given in a few words, may not be out of place here and is offered for the use of those who may feel themselves in need of such information; perhaps they may soon find themselves thrown, whether as soldiers or administrators, into a position of responsibility towards the country and its natives.

Although part of a continent, India is virtually in an insular position, as regards communication with the outer world, in consequence of the obstacle presented by the difficult mountain region which bounds it from N.E. to N.W. round the whole of its land frontier. Practically, and

apart from communication by sea, it is only from the passes leading from Afghánistán, the Khaibar, Gomal, and Bolan, that the stream of commerce flows into the land. Mountains with passes 12,000 to 19,000 feet high separate India from China, Tibet, and Kashgar. The sea has done its part in completing the isolation of the land, natural harbours are few, and, with few exceptions, the people of India are no sailors and have even a superstitious dread of the ocean—the *Kála Páni* or black water. This island character of the country, as in our own case, has kept it distinct from others; and though India has received many immigrant peoples, during the last thousand or so years there has been no emigration;¹ that of the Gypsies, whenever it occurred, is the exception that proves the rule. The successive immigrants have often merged some of their own characteristics in those of the people they came amongst or conquered. What was already in the country remained there; there was no thoroughfare, and thus the peculiar customs of India grew up, making it the self-contained country we now find it.

The history of India—and it is its history which accounts for the present condition of any land—is that of its races and creeds, with their migrations, conquests, and progress in civilization.

If we look from the present to the past, according to the method of some who deal with history, we find that just as the progress of our conquests since the middle of the last century (putting aside the contests in Southern India, in the Carnatic, with the French, with Hyder Ali, and afterwards with his son Tippú) was, from Calcutta, up the valley of the Ganges, up the broad belt of “the plains”—a traversable country, rich, cultivated, and inhabited by the

¹ About the period of the great religious revival through the influence of Buddha (*circa* 500 B.C.), which, at one time, India largely accepted, although Brahminism has since regained its ascendancy—and in the centuries closely preceding and following our era, and perhaps almost to the time of the Mahomedan invasion, the Hindus as a nation were conquerors and colonizers. Their language, and traces of their occupation, are found in Java, and on other Islands and coasts of the Eastern Seas.

most civilized and advanced of the Indian people—so in former periods, from the time of the first immigration, from the north-west, of the Indo-European, or Aryan, Sanskrit-speaking races (*circa* 2000 B.C.), and throughout that of the successive waves of invasion of the Mahomedan conquerors,¹ it was always this same tract of country that became the highway of the nations and armies.

It is consequently in this country, the old Hindustán, that Hindustáni, or Urdú, the mixed camp language derived from those of the conquerors and the conquered is commonly spoken²; elsewhere in India it is only a *lingua franca*, a medium for intercourse, but imperfectly known.

But to understand its history the geography of a country must be considered. One cannot realize India without taking good account of the broad belt of the low-lying "plains," running parallel to the N.E. and N.W. frontier, from the Bay of Bengal to the Punjab, and thence down to the sea at Karáchi: a flat country uniformly peopled in its several tracts. The great forests, the deserts, and the lesser hill-ranges, with the often very fertile regions between them, are confined to the central and southern parts of India enclosed between "the plains" and the sea, and comprised under the general terms Rájputána, Central India, the Dekkan (south country—the great raised plateau abutting on the sea coast about Bombay and to the south of it in the chain of the Gháts, and sloping towards the east) and Southern India.

After this prelude we may perhaps be better led to grasp an idea of the races which people the country, some of which supply fighting men for our army.

Beginning with Southern India, and Madras (our earliest

¹ Beginning with that of Mahmud of Ghasni, almost a contemporary of William the Conqueror, and culminating with that of Baber, a Turk from Ferghana in Central Asia, the grandfather of Akbár the Great, and founder of the dynasty of the powerful Great Moguls (Mongol), in the time of Henry VIII. of England.

² Even here the Hindus avoid its use, their proper language being Hindi. The late Maharaja of Balrámpúr related that when a boy his mother always beat him if he used a foreign word. (Communicated by Mr. W. Benett, Bengal Civil Service).

establishment, ceded in 1639), the bulk of the population is found of the Tâmil race, owning a language which has its own written character and extensive literature; people of very dark complexion, rice-eating, of moderate stature and less warlike disposition than the more northern races. These are representatives of the aboriginal inhabitants of India who accepted the religion of the conquering Aryans, at the same time profoundly modifying it by introductions from their own Pantheon, and retaining many of their own older habits and customs. Allied to the Tâmil, and of the same so-called Dravidian stock, are other races and languages, less important or less numerous, the Telégú, Canarese and Coorg. That some of the people of southern India are capable of being made good soldiers we may infer from our long struggles with the armies of Hyder Ali and Tippú Sahib of Mysore, which were probably not entirely recruited from natives of other countries or parts of India.

Passing to Lower Bengal, on the lower Ganges, we have a population of some 40 to 50 millions, largely rice-eating, very unwarlike, but acute, lawyer-like, and intellectually developed. The language¹ and the race are Hindu, though nearly a third are proselytes to the Mahommedan religion. The stock is Aryan mixed with the earlier settled races.

Ascending the Ganges, in the Doáb between that river and the Jumna, the story of conquest already touched on is the key to a knowledge of the population, a mixed race of all classes but chiefly Hindus, the servants of each successive conqueror. Here, although many high-bred families and respected classes are found, the conqueror's heel has had its marked levelling effect, habituating the people at large to see their natural ruler in the latest occupant of the throne of power. Here, too, the caste system of India, so much abused but which has done good service in organizing society, preserving the civilization and directing the morality of the people,² is found in full development; of the four classes, priests,

¹ Bengali.

² Dubois, "*Mœurs, &c., des peuples de l'Inde*," chap. ii., p. 29.

soldiers, traders and *súdras*—cultivators, herdsmen, servants, &c.—the lowest of the latter are almost readily distinguishable by their black skins and faces as the descendants of the aborigines relegated to that position by the ruling instinct of the imperious Aryan. On the flank, to the East, lies Oudh, the central representative province of regions to the N.W. and S.E. of it, with an almost purely Aryan population nourished on so rich a wheat- and milk-producing soil that their physical character and valour alone, rather than any inaccessibility of their country which lies open, has enabled them to preserve a marked individuality. This is the country which furnished the old sepoy army of Bengal, and whose people, under the name "Poorbeah"—the man from the East—largely recruited also the Bombay army. Towards Delhi a fine agricultural race of similar origin, the Játs, are relied on as a valuable fighting element. In all this region of Hindustán, the Mahommedans, while in the minority, are numerous. Although they have borrowed from the Hindus customs as to exclusive eating and drinking and intercourse which have nothing to do with their religion, the effect of the latter keeps the two classes entirely apart; on the recurrence of festivals, it is the constant object of solicitude of the civil authority to prevent hostile collisions between the parties.

Coming to the Punjab, the land of the Sikhs, the population, chiefly Aryan and Hindu but with a large proportion of the Mahommedan religion, numbers about twenty millions, of which about one-tenth only are true Sikhs although they form the characteristic element. The Sikh (*lit.*, disciple) is distinguished not so much by race as by his religion, which, founded in the fifteenth century, was developed in the seventeenth, under Gúrú Govind who established a theocratic government. Overpowered by the Great Moguls (1710-1716), this government was overthrown, but the Sikh spirit survived, and later, under the rulership of the celebrated Ranjít Singh, a powerful state and army was formed which was maintained until 1849, when it succumbed to the British

power after the battle of Chilianwala. At the present time the Sikhs, together with the other inhabitants of the Punjab, whether Hindu, as the Dōgras (Rájpúts), or Mahommedan, as the Panjábi Musulmáns, and the Pathán Musulmáns, the latter being descendants of Afghán or other Asiatic invaders of India, are reckoned among our best and most willing soldiers.

Having tracked up the highway of the invasion of India, and having referred—first—to the great immigration (2000 B.C.) of a people whom we call Aryan,¹ ethnologically our own relatives, who implanted their own religion and social system in the land, and—next—to the successive invasions proper of Mahommedan conquerors, who came as rulers more than legislators, we may turn back to the central parts of the country. Here lie, beginning from the north, the congeries of states of Rájpútána, still under native government,² occupied by a highbred people of the old Hindu (Aryan) stock, but sometimes turned to the Mahommedan religion. Beyond, towards the south, are seated the Mahrattas, a people once politically important, who principally occupy the more or less hilly country from Gwalior to the coast southward of Bombay, Hindu in religion and partly Aryan in race, but probably resulting from a fusion of peoples pressed back south by the earlier invaders. Their power, which came first to notice about 1700 A.D., is now split up among several states, with headquarters at Gwalior, Indore, and Baroda. In their time they showed more disposition for predatory warfare than for discipline or governing capacity, and though warlike and dominant, they are not largely represented in our armies, except perhaps in those of the native states.

The real aboriginal inhabitants of India, some seven millions, are found in the forests of Central India and in other outlying tracts, the less accessible regions to which

¹ Aryan—*lit.*, noble. Imperial Gazetteer of India, Sir W. W. Hunter, vol. vi, India, p. 52.

² "The English government has respected the possessions of native chiefs, and one-third of the country still remains in the hands of its hereditary rulers." *Ibid*, p. 43.

they have fallen back, or in which they have remained undisturbed, just as we find the oldest races of Europe in the north-west of Ireland, Russia, and Norway, and the north of Spain. Of these aborigines the Bheels, to the west of Rájputána, are well known; they are fine brave men but uncultivated savages. Other races are Santáls, Gonds, and Kols; these are the true heathen, knowing no book religion unless in cases where they have accepted Christianity, and not lending themselves to civilization except as workers in coal mines where such exist. There are also numerous tribes towards the Eastern frontier, and about Assam, very barbarous, but scarcely aboriginal, being allied to the Mongolian stock.

All others than these aborigines, whether Hindus, Mahommedans, Sikhs, or other sects, have their ancient religion, literature, and history. We may name specially the Parsees, who, though only some 100,000 in number, hold a position of influence as a superior race, particularly about Bombay; of the ancient Zoroastrian religion they migrated from Persia about 700 A.D. when oppressed by the invasion of Arab Mahommedans. Speaking generally, all these peoples are wheat-eating and milk-consuming, and consequently of good physical development; rice is the staple food only in Southern India, Lower Bengal, Assam and tracts of less importance; the food of the aborigines is various, that of the Bheels perhaps the best. There are numbers of tribes, races or sects, with their own languages and sometimes also religions, which have not been named, but the outline given will perhaps enable such as may be met with from time to time to be referred to their origin, or to an affinity with the stocks enumerated.

It has been sought to offer a means of understanding the peoples of India by the light of their origin and relationships, and it was necessary to explain this by reference to their past history. When however it is remembered that within the time of this generation, railways and telegraphs, educational colleges, "steam jennies," and the modern application of the industrial arts, have been introduced into India, and that

18,000 miles of railway have been laid since 1856, one can better realize that a new era has dawned and that, necessarily, changes are succeeding one another which may ere long efface some old landmarks.

From causes impossible to detail, partly perhaps from the unfortunate application of the term Indian to many races essentially barbarian, Englishmen have often gone out to India disposed to regard scornfully all whom they meet, looking down on all alike as mere blacks. This temper, so prejudicial to the true interests of a governing power, has to be overcome by enlightenment; it is as a help to a better understanding that this sketch of India and its inhabitants is offered.

Through knowing something of the history of such diverse peoples, affecting as well the population or the races of the several provinces as also the several classes among those populations, one may learn to discriminate between them and to respect them better; not classing all together according to their prevailing colour, nor reckoning them alike by the standard of those with whom we may be thrown immediately in contact. Caste, class, so well known also among ourselves, nowhere claims recognition more than in India. Mutual respect is the best foundation for friendship, and this does not exclude that proper influence which the exercise of politeness and forbearance will ensure. People of high and ancient civilization and culture, with such capacity for war, and for the arts of government in peace, as so many of the races of India have shown, are well entitled to all the respect our sons can show them; and since, properly manifested, it will ensure their respect in turn, it is our best policy to exercise it in all our dealings.

A word on the system of revenue. This has been from old time based on land rent; the state, the Sirkár, is the universal proprietor. To this system we succeeded, and it accounts largely for the rapid progress and speedy consolidation of our conquests, as indeed for the same features in those of our predecessors in the same line. *Ote-toi de là que je m'y*

mette has been the uniform dictate of the stronger power. In Lower Bengal a "permanent settlement" was effected by Lord Cornwallis; elsewhere it is subject to periodical revision, but, generally, whether the state collects its revenue from the Zemindár (land holder), as in the North West Provinces and Oudh, or deals directly with the Ryot (cultivator), as in Madras and Bombay, fixity of tenure is recognized. Under our government the proportion in which revenue is derived from land rent, as compared with other sources such as income tax, has materially diminished; also the share of land rent claimed by the government is now much less in proportion to the gross produce than of old, all which tends to the great relief of the Ryot.

To quote from a lecture by Sir W. W. Hunter,¹

"The past 35 years have been spent in making the British Empire of India safe, in making her peoples prosperous, and also, thank God, in making them loyal. . . ."

The true interest of all the Indian peoples in maintaining the Pax Britannica is thus expressed. . . .

"The first duty . . . imposed . . . on the governing power was to make India secure. The Mutiny had cost many more Indian lives than European lives; it led to a far more widely spread plunder and destruction of native than of European property; it left behind on the shoulders of the innocent Indian tax-payers a burden of £42,000,000 of new debt. We had disarmed the races of India, and we were bound to assure the safety of the peoples from whom we had taken away the means of self defence. The basis of all sound and permanent progress in India is the safety of India."

Sir William goes on to describe how in 1881 our British troops in India numbered 60,000 and the native army 110,000, total 170,000, but that, during the 12 years which followed, the military problem in India underwent a change.

"The steady advance of Russia⁴ in Central Asia, and her contact with the states on our north-west frontier, transformed the freedom from external danger which India had previously enjoyed into a condition of affairs approximating to that of the great armed states of Europe," consequently, "in 1891 the combined forces had been raised to over 71,000 British and 149,000 natives, total . . . 220,000." Besides which, the feudatory

¹ "Progress of India under the Crown," delivered before the Society of Arts. See "Journal," February 24th, 1898.

princes raised an imperial contingent of 19,000, and the Anglo-Indian and Eurasian volunteers in 1891 numbered 23,000.

"The internal safety of India has thus been secured by a reconstitution of her army, and by a widely-spread unobtrusive system of local defence works scientifically planned and vigilantly inspected—a combination of living strength of control, and of physical difficulties placed in the way of revolt, which not even Dalhousie would have ventured to think possible when the government passed to the crown. But in regard to material defence works as in regard to the organization of the army, the safety of India is no longer a problem of internal protection alone. The long land frontier of the north-west, whose difficulties were only emerging in Dalhousie's time, is now recognized to be one of the heaviest responsibilities of the British rulers of India. In October, 1885, the Secretary of State for India gave his general approval to a plan of frontier defence, carefully elaborated by Sir Donald Stewart, then Commander-in-Chief. . . ."¹

Historical :—As far back as 250 years ago there already existed in Bengal the germ of the splendid army that now garrisons India from Peshawur to Cape Comorin, in the form of an establishment restricted by the native princes to a guard of an ensign and 30 men. In 1681 the force maintained appears to have consisted of a corporal "of approved fidelity" and 20 men. In 1683 the army of Bengal consisted of a Lilliputian force of 250 Europeans.

Twelve years later, native soldiers were first enlisted. The English were by now installed at Calcutta, as they had been already in Madras, and in 1701-2 the garrison of Fort William consisted of 120 soldiers and seamen gunners. This was the fort captured in 1756, by Siráj-ud-Daula (known to history as Surajah Dowlah) the Nawáb of Bengal, by whose orders was enacted the terrible tragedy of the Black Hole of Calcutta.

The succeeding year, 1757, witnessed the battle of Palási (Plassey) under Clive, from which date it may be reckoned that British supremacy was first established in Bengal. The armies of the three presidencies now increased so rapidly that in 1763 the Bengal army amounted to 1,500 Europeans, and 11,500 native infantry. In 1772 the Madras army numbered 3,000 European infantry, and 16,000 natives; and in the same year the Bombay army consisted of 2,500 Europeans and 3,500 sepoys. In 1808 the total force in India amounted to 24,500 Europeans, and 154,500 natives. But it is not within the scope of this work to follow step by step the development of the Indian army. Frequent wars during the first half of the century, and annexations of territory naturally entailed augmentation of the army, and the introduction of special local forces and corps. After the annexation of the Punjab in 1849, the most important of these came into existence under the title of the Punjab Irregular Frontier Force.

In 1856, the year preceding the great Mutiny, the force in India, including the "local" and "irregular" troops amounted to 38,000 Europeans of all arms, with 276 field guns, and 348,000 native troops, with 248 field guns. The Mutiny having been quelled by the autumn of 1858, the task of re-

¹ For India generally, see "Imperial Gazetteer," vol. vi., "India," by Sir W. W. Hunter.

organization commenced. The Crown took over the government of the country,¹ and the army was entirely reorganized. The Staff Corps system was inaugurated; the question of the proportion of British to native troops was gone into, and in general, the army in India of the present day exists much on the lines then introduced.

2. *Indian Army Establishment.*

As has already been stated, the Mutiny of 1857 produced a complete revolution in the organization of the forces in India. There has, however, always existed the general principle that Indian revenues should be charged with the cost of maintaining the British troops that are serving in, and for the defence of India. In 1858 by command of the Queen, a commission was appointed, having as members the then Secretary of State for War, the Duke of Cambridge, Commanding-in-Chief, Lord Stanley, and other officers of ability and experience, to inquire into and report upon the terms under which the army of the East India Company should be transferred to the Crown, as well as to consider all subsidiary questions as to the permanent force necessary to be maintained in India.

As regards the latter question, the recommendations of the commission were as follows:—

That a European force of much greater strength than existed previous to the outbreak of 1857 must be maintained for the future defence of India. (This force was laid down at about 80,000 men, of which 50,000 men were required for Bengal, and 15,000 for Madras and Bombay respectively.)

That the proportion of Europeans to natives in cavalry and infantry should stand thus:—the native force should not bear a greater proportion to the European than 2 to 1 for Bengal, and 3 to 1 for Madras and Bombay respectively. The artillery, with minor exceptions, was to be all European.

Practically, it may be said that every one of these recommendations was adopted—and they still form the basis on which the entire military force in India is organized at the present time.²

¹ For the new obligations entailed on the government of the United Kingdom owing to its taking over that of India, see chap. iii.

² *Ibid.*

The Indian army as a whole (*i.e.*, both British and native troops) is maintained for the following purposes :—

- (1) To safeguard India from external attack.
- (2) To ensure the impossibility of a successful internal revolution.
- (3) To share in operations outside of India, or beyond seas.
- (4) To keep complete check over the armies of feudatory native states.
- (5) To maintain the authority of the civil officers of the Crown and enforce law and order.

When officers or troops from home land in India they are taken on what is called the Indian Establishment, and are paid by the government of India ; at the same time they come under Indian regulations and army orders special to the country : only a limited portion of the English regulations are applicable in India.

3. *Composition of the Army.*

British Regiments and Corps.—The following figures are taken from the Indian Military Budget Estimate for 1892–3, and show the total British force in India exclusive of all British officers employed with the native army.

British troops by presidencies :—

Bengal	44,916
Madras	14,888
Bombay	13,193
Total ..	<u>72,997</u>

The detail of the above figures is as follows :—

BRITISH CAVALRY.				
Bengal .. ..	..	..	..	6 Regiments
Madras .. ..	..	..	..	2 „
Bombay.. ..	..	..	..	1
Total ..	..	..	..	<u>9</u>

ARTILLERY.

<i>Batteries and Companies.</i>							Total
Bengal	—7	horse	;	22	field	;	51
					7	mountain	;
					2	heavy	;
					13	garrison	..
Madras	—2	„		8	„	1	„
						1	„
						3	„
							..
Bombay	—2	„		12	„	1	„
							..
						7	„
							..
Grand Total							88

BATTALIONS OF INFANTRY.

Bengal	..	..	..	..	33
Madras ¹	..	..	..	..	11
Bombay	..	..	..	..	9
Total					53

The establishment of each branch of the British army in India is as follows:—

British Cavalry.

A regiment is composed of:—4 squadrons of 29 officers and 601 all other ranks. Total, 630, with 525 horses.

<i>Artillery.</i>					Total.
Battery of horse artillery, 5 officers, 157 all other ranks ..					162
Horses	{	Peace establishment ..	..	..	169
		War establishment ..	..	..	198
Native Drivers	{	Peace establishment..	..	..	7
		War establishment ..	..	..	9
Battery of field artillery, 5 officers, 157 all other ranks ..					162
Horses	{	Peace establishment..	..	..	110
		War establishment ..	..	..	143
Native drivers	{	Peace establishment..	..	..	8
		War establishment ..	..	..	10

Of these, 4 horse and 7 field batteries are maintained at war establishment, and, besides, 7 units of 6 reserve ammunition wagons each are kept up.

Heavy battery. Four 40 pr. R.M.L. guns and two 6·3 inch R.M.L. howitzers. 5 officers, 95 all other ranks. Horses, 5; elephants, 12; bullocks, 262.

Battery of mountain artillery. Six 2·5-inch R.M.L. guns. 5 officers, 106 all other ranks. 6 hill ponies, 138 ordnance mules, and 76 baggage mules. Native establishment, drivers, 149; baggage drivers, 32; artificers, 11.

Company of garrison artillery. Five officers and 140 all other ranks.

Battalion of British Infantry.¹

The establishment of a battalion of British infantry is:—

8 companies—officers, 28; all other ranks, 984. Total, 1,012.

¹ A slight alteration in establishment of the British army in India is under consideration, but final sanction has not yet been received. It consists in reducing the Indian establishment by one battalion, and at the same time

Many changes have occurred in the authorized strength of British infantry corps. During the Mutiny, Her Majesty's foot regiments were over 1,000 strong. At the time of the Afghan war, 1878-80, the strength of a British battalion was 886 non-commissioned officers and men. The organization committee of 1879 recommended 1,044 non-commissioned officers and men. The above total of 1,012 is considered as the war strength for a battalion of British infantry in India, to which it must always be kept up.¹

Native Army.—Under this head is shown the establishment of the regular native troops of the three presidencies, *i.e.*, the troops under the commanders-in-chief of the three presidencies, as distinct from the corps which are still under the direct orders of the government of India, and exclusive of military police, imperial service troops, reserves, &c., which will be dealt with hereafter.

It may be mentioned that the corps under the orders of the government of India consist of about 14,000 troops, and include the Hyderabad contingent, Central India horse, and various other local corps. Until recently the whole of the Punjab frontier force was also included under this heading, but after the Afghan war of 1878-80 they were placed under the commander-in-chief in India.

Native troops by presidencies :—

Bengal	76,158
Madras	30,020
Bombay	27,522
Corps under government of India	13,803
Total	147,503

The detail is as follows :—

Bengal army and corps under government of India :—

Cavalry, 30 regiments.

Infantry, 75 battalions.

Artillery, 1 garrison company and 10 mountain batteries.

adding 20 men to each of the remaining 52 battalions, bringing them up to 1032 of all ranks. The reduction would be made from the Madras establishment, which would then have 10 battalions instead of 11, and the total establishment would be 52, though there will be no diminution in the aggregate number of men; 1,040 men in all being added to the 52 battalions in place of the 1,012 withdrawn.

¹ See chap. vii., for comparison of establishments in India, the colonies, and at home.

Madras army :—

Cavalry, 3 regiments.

Infantry, 32 battalions.

Bombay army :—

Cavalry, 7 regiments.

Infantry, 26 battalions.

Artillery, 2 mountain batteries.

In addition to this there are in the three presidencies, 21 companies of sappers and miners—viz., 8 Bengal, 8 Madras, and 5 Bombay. Also a submarine mining company with headquarters at Poona, and 4 sections, at Karachi, Bombay, Calcutta, and Rangoon, respectively.

The establishment of each branch is as a rule as under :—

Cavalry—4 squadrons.

British officers, 8 ; natives of all ranks, 625.

Infantry—8 companies.

British officers, 8 ; natives of all ranks, 912 in Bengal and 832 in Madras and Bombay.

Artillery—Six 2·5 inch R.M.L. guns (screw guns).

British officers, 4 ; natives of all ranks, 256.

• As regards the mixture of classes in regiments, the variation in race of the units of this large force is so very great that it would be quite impossible within our limits to attempt to enter into the subject more than very briefly. Leaving out the totally different races comprising the forces in Bombay and Madras, and referring to Bengal only, it may be stated that scarcely a single regiment of either cavalry or infantry is composed of one class of men.¹ The most notable exception is in the case of the Gurkhas, who are a people distinct from the natives of India, and have their own customs ; they are men of small stature from Nepal, accustomed to the hills, and forming unsurpassed infantry fighting material. Each Gurkha regiment is composed of Gurkhas only. Of these there are five regiments, numbered from 1 to 5, of two battalions each, and in addition three independent battalions included in the numbering of the Bengal infantry.² The so-called Sikh regi-

¹ Since the above was written a general order has been issued entirely revising the constitution of the Hindustani infantry of the Bengal army, by which these regiments, hitherto organized in class companies, will now be transformed into class regiments, the reorganization being carried out by the transfer of entire companies under their own native officers. These changes affect sixteen battalions of Bengal infantry.

² The 42nd, 43rd, and 44th Gurkhas.

ments are as a rule not composed of Sikhs only—in most cases only about half the regiment consists of Sikhs.

The unit in the infantry and cavalry is the company and troop respectively, and, in the native army at large, each of these is composed of one class of men only, though there may be many different classes in the regiment as a whole. As an ordinary instance of variety in the composition of these units the constitution of one cavalry regiment of the frontier force may be mentioned. Of the eight troops forming the regiment the 1st troop is composed of Sikhs, the 2nd of Dōgras, the 3rd and 4th of Rājput Mahommedans and Hindus, the 5th of Pathāns (Trans-Indus Mahommedans), the 6th of Sikhs, the 7th of Punjābi Mahommedans, the 8th of Sikhs. Each squadron therefore is composed of two troops of different classes and it will also be seen that the total proportion of Hindus to Mahommedans is fairly even.

This constitution of the native army is in accordance with the recommendations of the Royal Commission of 1859 already referred to, and which ran as follows :—

“ That the native army should be composed of different nationalities and castes, and, as a general rule, mixed promiscuously through each regiment.”

As indicated on p. 446 the Bengal army before the mutiny had consisted almost exclusively of Oudh men, the Hindus and Mahommedans promiscuously mixed. After the mutiny other nationalities were recruited, and class companies were introduced.

Volunteers.—Much depends and has more than once in the past depended on the invaluable assistance rendered by these corps, raised from the European and Eurasian communities, which otherwise would have no opportunity of contributing to the strength of the local armies. The work done by rapidly raised regiments of volunteers, especially of cavalry, in the great Mutiny is a matter of history, and such leaders as Havelock have had experience of the fact that without their assistance success would have been doubtful but up to 1860, there had been no regularly organized movement in this direction. From that date the work com-

maned in earnest. A rifle corps was formed in Sítabaldi (Nagpúr provinces), two more in the Punjab, and in 1862 the Behar light horse was raised. There are now, in addition to artillery, cavalry, mounted rifle corps, and rifle regiments in the three presidencies, three naval corps at Calcutta, Karachi, and Aden respectively. The volunteers have, more than once, since the Mutiny, been called on for active service. A mounted rifle company of the Rangoon volunteers served in Upper Burma in 1885, and was present at the taking of Mandalay. The pioneer company of the 1st Calcutta rifle volunteers took part in the recent expedition to Manipur, and the Behar light horse and Sibságar mounted rifles have more than once been called out for military duty in aid of the civil power.

The enrolled strength of volunteers in the whole of India on the 1st November, 1892, was 27,086, which includes 1898 reservists. They consist of—naval volunteers, two corps (exclusive of Aden), each of one company; cavalry, or light horse, 10 corps, numbering 28 troops; artillery, 5 corps—7 batteries; mounted rifles, 9 corps—11 companies; and, finally, infantry, 53 corps, numbering 290 companies.

The *employés* of the state railways, recruited in India, are obliged by the terms of their engagement to join the railway volunteer corps.

To conclude this heading the following remarks from a great authority may be quoted as showing how vastly important is this question of military training of volunteers.

“We must always recollect that in India we are surrounded by a population composed of many different nationalities; that we live amidst alien and semi-civilized multitudes; and that we cannot hope to realize, within any space of time which can be practically considered, the optimistic dream of a condition of things where elements of disturbance are absent. It is of infinite importance that the ‘*pax Britannica*’ should not be disturbed for a single day.”

[And he goes on to show how the military forces should be vigilantly maintained in readiness for the support of the civil power in the maintenance of order, as is indeed so necessary in the common interest.]

In February, 1892, the Governor General in Council directed a committee of volunteer officers to assemble at Calcutta to consider and report on various important questions connected with volunteering, and the first proposal it had to consider was whether or not it should be com-

pulsory for all servants of government to become volunteers. The committee, though they considered it undesirable at present that the bearing of arms should be made a condition of government service, suggested that the government of India should address all local governments on the extreme importance of enlisting the active interest and co-operation of all heads of departments in the encouragement of volunteering among their subordinates.

*Military Police.*¹—This force owes its existence principally to the extensive operations necessitated by the subjugation of Upper Burma, and for the pacification of that country. The first force of military police for this purpose was raised in March 1886, and consisted of two levies composed of Gurkhas, Punjabis, and Hindustanis, 500 of each, with 11 native officers and 50 non-commissioned officers in addition. Besides these two levies, a military police force of a strength of about 3,300 was raised in northern India. The native commissioned and non-commissioned officers and a portion of the men were volunteers from the native army, the remainder being enlisted. Later in the same year some 7,000 additional police were raised, the whole being for service in Burma.

4,500 more police were raised in 1887, and in the following year three further levies, as under, for service in the districts specified, viz. :—

Shan state levy	600 Punjabis.
Mogaung levy	500 Gurkhas and hill men.
Chin levy	400 Punjabis and 200 Hindustanis.

It will thus be seen that the military police raised for service in Upper Burma in these three years amounted to over 18,000 men, but in 1891 four battalions were transformed into local corps of the Madras army, and the number, therefore, of the Upper Burma military police was thus reduced to about 16,000.

There are usually with a military police battalion two British officers, termed the commandant, and the assistant-commandant. These are, in every case, officers of the Indian staff corps of the three presidencies, and of the rank of captain or lieutenant. They remain on the rolls of their respective regiments, being merely seconded for these special commands, and usually reverting, after five years, to their regiments.

In addition to the Upper Burma military police battalions there are also four battalions of Assam military police, nearly 3,000 men, and a Chittagong frontier police battalion of about 450 men.

¹ It is to be understood that this force of military police is quite distinct, both in organization and training, from the ordinary police force employed throughout India. The Indian police generally is a highly organized force with a semi-military training, though the officers are not now-a-days military men, except only in the case of the head officers called Inspector-Generals who, with few exceptions, have hitherto been commissioned officers of the staff corps. The force, though trained under its own officers, is subject to a general control by the magistracy and the local governments, and its duties are the maintenance of law and order and the detection of crime.

Armies of Native States.—Without entering into the political aspect of this question, *i.e.*, as to the advisability or otherwise of the retention in native states of these forces, it may be remarked that their existence has in every case been sanctioned by treaty in the first instance, either by the East India Company, or later by the government of India. It may not be generally known that there are over 120 native states throughout the length and breadth of the land whose rulers keep up this manifestation of sovereignty, and this number includes those states only which are burdened with what are termed “regulars,” there being many others in addition which keep up “irregulars.” Further, in every state where there are regulars a number of irregulars are also maintained which in some instances greatly exceed the regulars. The definition of “irregulars” would be somewhat vague. It may be taken as a rule that they are not regularly drilled, probably wear no uniform, and may or may not be armed with anything more than a sword or smooth-bore musket. The “regulars,” on the other hand, in some native states are often well-dressed, drilled, armed, and mounted. The whole of these native states are in relation with the following nine governments or agencies, under the Viceroy of India—viz., Government of India, Rájputána, Central India, Bengal, North-west Provinces, Punjab, Madras, Bombay and Assam.

There are two classes of troops maintained under treaty with native states—viz., subsidiary forces, designed for mutual defence against an external enemy of the states and of the paramount power; and contingents kept up to support a native ruler against the chance of insurrection. For the support of these forces certain territories have been ceded to the paramount power.

In the year 1800, by a treaty of general defensive alliance with the Nizam of Hyderabad, the East India Company agreed to maintain a subsidiary force of 8,000 infantry, 1,000 cavalry, and a proportion of artillery, the Company declaring that the British government would never permit any power or state whatever to commit with impunity any act of aggression against the rights or territories of the Nizam.

For the payment of this subsidiary force certain territories were assigned and ceded to the Honourable East India Company, and the Nizam engaged to furnish in war certain troops to be added to the subsidiary force; the Company at the same time made counter engagements to support the Nizam.

By the treaty of 1858, concluded under Lord Dalhousie, it was agreed that a portion of the subsidiary force—viz., 5 regiments of infantry and one of cavalry, with a due proportion of guns, should be stationed within the territories of the Nizam. In lieu of the force engaged, as above stated, to be furnished by the Nizam, the Company agreed to keep up, as an auxiliary force, the Hyderabad contingent, consisting of 5,000 infantry, 2,000 cavalry, and 4 field batteries, to be available always to support the Nizam throughout his whole dominions against rebellion or disturbance. In the event of war it was agreed that the subsidiary force, joined by the Hyderabad contingent, should be employed in any manner that the British government might consider best calculated for opposing the enemy, provided that two battalions of sepoys should always remain near the capital of Hyderabad.

Imperial Service Troops.—In 1889, under Lord Dufferin's vice-royalty, was introduced the most important reform in the organization of armies of native states that has yet been attempted, the effect of which cannot yet be gauged, as the organization is by no means completed. The change may be designated as a new departure in the policy of the government of India, or in other words the acceptance of the principle that the feudatory princes and their armies are no longer to be regarded chiefly as a source of danger, but rather as a reserve of force. So far it has not transpired that this deliberate policy of substituting an attitude of watchful confidence for one of uneasy mistrust has been attended by any less result than complete success. X

Generally speaking, the scheme was as follows:—

It was decided, instead of accepting the offers of money to the amount of more than 125 lakhs¹ made by many of the native chiefs for purposes of imperial defence, to obtain their co-operation for these purposes by a reorganization of a portion of their armies.

The reorganization was to be effected by a selection being made of the subjects of the states furnishing these corps; in time of peace they would remain under the complete control of the states to which they belong, but would be organized and equipped on a uniform plan with a view to their being able in time of war to take their places in co-operation with the British forces, to effect which they were to be inspected and trained, but not commanded by British officers.

The rulers of native states made certain definite offers to the government

¹ A lakh is Rs. 100,000, or by exchange at, say 1s. 3d., £6,250.

of India, some of which have been accepted in a modified form; others are still under consideration. Two instances will suffice:—

The Maharajah of Kashmir offered to give one million rupees and to place at the disposal of government all the troops and *matériel* of war which his state possesses. The government of India accepted 2 squadrons of cavalry, about 350 men; 6 regiments of infantry, about 3,700 men; and 2 mountain batteries (each of 4 7-pr. rifled guns). It should be added, however, that the military liabilities of Kashmir are different to those of other native states, as it has to safeguard its northern frontier, which is the first duty of its imperial service troops. Those not now employed on the Gilgit frontier are at Jammu, and in the event of general mobilization the destination of the force or balance of the force not employed on the border, would be Jammu.

Another instance which may be taken as typical is that of the Punjab chief, the Maharajah of Pattiala, who offered to give all the resources of his state in the shape of treasure, troops, &c. The government of India accepted 4 squadrons of cavalry = 600 men, and 1 regiment of infantry = 1,000 men.

✓ The government of India had, up to the middle of June, 1891, accepted the services of 19 states. The offers of 9 other important native states were then still under consideration, as were those of 22 lesser states. The total strength which it is expected that this scheme will eventually provide for the assistance of the British Indian army amounts to 10,000 cavalry and 11,000 infantry.

Finally it should be borne in mind that by no means the least important result of the imperial service troops organization is that as the scheme develops so will the reduction in the numbers of the undisciplined rabble, which formerly constituted a large proportion of the armies of the native states, undoubtedly take place; for instance, when the imperial service brigades of Kashmir are completed, the remainder of the Kashmir army, maintained principally for ceremonial purposes or prestige, will not exceed 3500, as against a figure of over 22,000 as shown in the returns for 1888. A statement prepared in 1890 shows a decrease of no less than 25,000 men since 1887, in the military forces of five of the great districts of India. This, however, includes the reductions as above effected in Kashmir.

To conclude this section it would appear that when the two measures for forming reserves for the native army, and for organization of the imperial service troops, have been fully applied, there will be an additional force of native soldiers equivalent to about 50,000 to 60,000 men.

Cost of the Army.—The cost of the Indian army in 1856, immediately before the Mutiny, was 127½ million rupees, and in 1887–8 over 204½ million, which includes loss on exchange in Home charges, and there was in addition a charge of 18½ million for military works including special defences.

The net expenditure on the army in 1890–91 was:—

In India	...	Rx 14,069,220
In England	...	Rx 5,835,213
		<hr/>
Total	...	19,904,433

or a little under 200 million rupees.¹

3. *Departments,² and how officered.*

The following are under the military department of the government of India, which is dealt with in sect. 5, p. 469, under the heading of Administration of the Army in India.

(a) *Ordnance.*—This department has for its head an artillery officer of high military rank (usually a major general) who is the chief authority under the government of India in the military department in all matters appertaining to this branch in the three presidencies. His official designation is Director-General of Ordnance in India. Next to him comes the Deputy Director-General of Ordnance in India.

The three presidencies form four circles—viz., the Eastern Circle, Bengal, Calcutta; Western Circle, Bengal, Rawal Pindi; Madras Circle, Madras; Bombay Circle, Poona, each under an inspector-general. After these come ordnance officers of the 1st, 2nd, 3rd, and 4th class, and the ordnance manufacturing establishments, of which there are altogether in India 9—viz., 2 gunpowder factories, 2 small arms ammunition factories, 3 gun carriage factories, 1 harness and saddlery factory, 1 foundry and shell factory, each under a superintendent. In every case the appointment is held by an officer of the Royal Artillery, varying in rank from captain to colonel.

(b) *Medical.*—This important department is constituted and the duties and responsibilities are shared as follows:—

With the government of India, an officer of the highest medical military

¹ Rx = tens of rupees. When the expression Rx is not used, but, as in Indian Budget Estimates, the sum is expressed in rupees (R), the system of notation is as follows:—the punctuation above 1,000 does not, as in England, denote thousands, millions, &c., but a hundred thousand = one lakh, and one hundred lakhs = one crore; thus a sum of, say, fourteen million, thirty thousand, and forty-six rupees, is expressed 1,40,30,046; i.e., 1 crore, 40 lakhs, 30 thousand, and 46 rupees. This is because the natives count large sums in lakhs = 100,000, and crores = 10,000,000.

² For Judge Advocate General's and for Veterinary Department in India, see chap. xvii.

rank¹ is appointed, whose principal duties are to advise the government of India on all questions of sanitation, &c. He is charged with the control of the medical system in gaols and civil dispensaries, in addition to the appointment of all sanitary medical officers, and of the so-called civil surgeons of stations in India. These latter belong to the Indian medical service, and their services have first to be obtained from the Principal Medical Officer, H.M.'s forces in India, under whose orders they are.

The principal medical officer, H.M.'s forces in India, is an entirely separate appointment. This officer (also of the highest medical military rank) has the supreme direction of the medical department concerned with troops, both British and native, in India. It should be here stated that the British and native medical services are quite distinct.

The introduction of the British system of station hospitals, instead of regimental, has not hitherto been deemed practicable as far as native troops are concerned, the consequence being that officers of the Indian medical service on a vacancy occurring in a regiment are gazetted as medical officers to the corps, and the regimental hospital system is maintained in each.

The principal medical officers, Madras and Bombay armies are in as nearly as possible a similar relation to the principal medical officer, H.M.'s forces in India, as the presidency commanders-in-chief are to the commander-in-chief in India.

It may be added that the medical officer with the government of India is usually of the Indian medical service, while the principal medical officer, H.M.'s forces in India and the two presidency principal medical officers are of the army medical staff (British service).

(c) *Commissariat and Transport Department*.—The title of the head of this department is Commissary-General in Chief. He combines the two important branches of commissariat and transport under one control. Besides this there is a commissary-general for transport only, but he is directly subordinate to the commissary-general in chief. There are 4 commissary-generals—viz., two for Bengal (Eastern and Western Circle), one for Madras, and one for Bombay. Under them are assistant commissary-generals of the 1st, 2nd, 3rd, and 4th classes and deputy-assistant commissary-generals of the 1st and 2nd classes in each of the three presidencies respectively.

The appointments in every grade are held by officers of the Indian Army.

Since the Afghan war the transport service has been constantly worked up till it has now reached a condition of efficiency never before attained, and it may be said that in the event of mobilization, transport sufficient for the troops about to take the field would be almost immediately forthcoming. The troops on the frontiers of India are, even in peace time, provided with half transport, the pack animals being in regimental charge.

(d) *Military Works Department*.—The Director-General of military works is the head of this department. There are two deputy directors of military works (one for works, one for fortifications), and the departmental officers are classified as chief engineer 1st, 2nd, and 3rd class; superintending engineers, 3 classes; executive engineers, 4 grades; assistant

¹ The Surgeon-General and Sanitary Commissioner with the Government of India.

engineers, 2 grades. These are all officers of the Royal Engineers, and are distributed over the three presidencies.

The title of the department speaks for itself, and includes all works of the nature of barracks, hospitals, and fortifications as distinct from the Public Works Department, which undertakes road-making, bridging, canals for irrigation, &c.

(c) *Army Remount Department*.—This is under the Director of Army Remounts. There are three superintendents of reserve depôts and three superintendents of breeding establishments; all are officers of the Indian army. Besides these there is a remount agent at the Presidency (Calcutta).

The supply of remounts for the horse artillery, field artillery, and British cavalry throughout India is arranged for under the orders of the director of army remounts, the imported horses being first sent to the reserve depôts, where they are classed and distributed to the various branches of the service.

Officers of the mounted branches of the British service and of native cavalry regiments can purchase chargers at the government remount depôts, subject to certain restrictions, and at certain fixed rates. The imported horses referred to above as being sent to the reserve depôts are for the greater part Australians (Walers). The government of India enters into contract with Australian dealers for remounts at a certain fixed price per head, and they are then imported to India. The Waler, therefore, is the class of horse most usually to be found in the ranks of all British mounted troops in India. A considerable number of Persians, half Arabs, or Arabs, are, however, also imported, and in the Bombay presidency there are certain batteries of field artillery entirely horsed from this source.

In the ranks of British cavalry regiments also may be found a fair proportion of remounts, the offspring of country-bred mares by imported sires. The breeding establishments where these sires are maintained are entirely apart from the remount depôts. A system has been adopted for some years now by which, in very many districts of India, government stallion establishments have been instituted, usually under the control of the local civil district officer. In some situations there may be only two or three sires to an establishment, but in more populous districts four or five times that number. The system is that the native farmer can bring his country-bred mares to the government stallions, for which service no fee is chargeable, the only proviso being that any mare permitted to be brought up should have been first branded by a government inspector as likely to throw a good foal. In this way it is hoped that in the course of time there will be considerable improvement in the general stamp of country-breds throughout the country. The class of government stallion varies considerably; they consist of both English and Waler thoroughbreds, Arabs, Norfolk trotters, &c. The progeny of these sires, however, does not become the property of the government at a rate that might be fixed, nor has the government any lien thereon, the owner of the mare being always at liberty to sell in any market he pleases, or to retain if it suits him. This class of horse is the one usually found in the ranks of the native cavalry regiments in Bengal and the Punjab.

Under the heading which follows, of "Recruiting for the Native

Army," the system of horse ownership in native cavalry regiments is mentioned. The remounts are usually bought at horse fairs, which take place at various seasons of the year in the districts throughout the country, and to which the native farmers or dealers bring their produce. As an extra inducement to the native owners prizes are extensively awarded by the civil authorities of the district.

It should be added that the three Madras cavalry regiments are provided by government with their troop horses, in the same way as British troops. In the Bombay presidency many native cavalry regiments are mounted on Arabs and Persians, the system of purchase and ownership, however, being the same as in Bengal. Some years ago an apparently useful and fine stamp of horse was largely imported from the Cape, but owing presumably to a regrettable cessation of supply the class is no longer to be found in India.

(f) *Military Accounts Department*.—Under the Accountant-General who is *ex officio* Deputy Secretary for Finance in the Military Department. He has, as staff, a deputy accountant-general and an assistant accountant-general. There are four controllers of military accounts for the four Circles¹; military accountants, in four classes; and assistant military accountants in three classes. These appointments are all held by officers of the Indian Army.

(g) *Ecclesiastical Establishment*.—There are four ecclesiastical establishments in India—viz., for Bengal, Madras, Bombay, and Burma respectively, entirely under the government of India. The chief bishopric is that of Calcutta² and the holder of this see has the title of Lord Bishop and Metropolitan of India and the Island of Ceylon. There are bishoprics to the remaining three establishments. The establishments comprise senior and junior chaplains, of whom there are 83 in Bengal, 41 in Madras, 26 in Bombay, and 10 in Burma. There are also chaplains of the Church of Scotland. Roman Catholic troops receive religious ministrations from the various missionary establishments.

4. *Recruiting for the Native Army.*

Recruiting.—This was the subject selected for the prize essay of the United Service Institution of India in 1891, as it is not unnaturally considered the most vital question affecting our military policy in that country. This will the more readily be granted when the fact is taken into consideration that an army of say 150,000 men has to be recruited from a population of 287¼ millions—spread over an area of 1½ million square miles—and that the army should be composed of the very best material existing in the midst of these millions, so that the question immediately arises as

¹ For these circles, see Ordnance Department, p. 463.

² The Bengal Ecclesiastical Establishment includes the bishoprics of Lahore and Lucknow.

to the selection of the particular classes or tribes, which are deemed the best suited for the purpose.

There is in India no lack of classes whose almost hereditary profession it has been to serve the state as fighting men. *Naukari*—service—is a passion with these large classes of natives, particularly those of Hindustan and the Punjab. To go away from home, to serve, and save money, while retaining their hold on the land in their native village, to which they return when their service has earned them the coveted pension, or the hour for retirement has arrived, is as much an ingrained custom in India as it is in Europe among the Swiss, and generally speaking the Indian native deserves a similar reputation for keeping good faith. The difficulty then in recruiting is only as to the choice to be made.

With the object of more effectually securing the best men of the most warlike classes the Secretary of State has quite recently sanctioned the establishment of recruiting depôts at certain stations, each of which is to form the centre of the recruiting district for the class specified. A detail of these is given with the object of showing the classes or castes of the Bengal presidency (including the Punjab) which have been selected as containing the most suitable elements :—

Peshawur for Patháns.

Ráwal Pindi for Punjábí Mahommedans.

Amritsar for Sikhs.

Sialkót for Dōgras.

Delhi for Játs and Hindustáni Mahommedans.

Lucknow for Hindustáni Hindus.

Gorakhpur for Gurkhas.

It will be seen that with the exception of Lucknow in Oude, and Gorakhpur in the North-West provinces as the most convenient centre for the Gurkhas from Nepal, the whole of the remainder are in the Punjab, the northern races of India being incontestably those among which the best fighting material is to be found. The Madras and Bombay presidencies and their recruit-producing areas will not be here discussed.

A specially selected officer is appointed to each recruiting centre, and his duties are to afford every encouragement, assistance, and information, to recruits and to make arrangements for their being conveyed free of expense to the regiments they may have selected. No compulsory drafting is permitted. The origin and status of these vastly differing races has been touched on in the introduction to this chapter. Each of the classes named, with the exception of Gurkhas, are enlisted for service in either cavalry or infantry as they may choose. The Dōgra, however, is usually an indifferent rider, but an excellent soldier in other respects.

The great difference in the constitution of the native cavalry and infantry regiments (always of the Bengal Presidency) may here be pointed out. Whereas the infantry soldier on joining is supplied by the state with almost everything in the way of uniform and equipment generally, the cavalry soldier, on the other hand, pays for everything he is provided with, including his horse and its feed and keep, the single exception being his carbine which is supplied by the state. A certain fixed sum is paid by him into the regimental horse fund on joining, and this fund is, in addition, maintained by a monthly subscription levied, according to rate of pay, on every man in the regiment from the native officers downwards. The recruit is then provided with a horse, which becomes, as it were, his own property, though of course he is held responsible that the animal is kept in proper condition. When his turn for furlough arrives, he can, if he chooses, take his horse to his home with him. For cavalry system in Madras and Bombay, see p. 466.

The pay of an infantry soldier is 7 rupees per mensem, and that of a cavalry soldier 31 rupees. Enlistments for the native army are made to include service beyond sea.

Discharges and Pensions.—Subject to certain restrictions a man may claim his discharge after 3 years' service. In case of unfitness he can be discharged at any period of his service, and receive a gratuity calculated on the length of his service up to 21 years, when he becomes entitled to a pension which he can then claim irrespective of fitness for future service or otherwise. The 15 years' service invalid pension (formerly granted) is abolished for all soldiers enlisted after 30th November, 1886.

Reserves.—In 1886 certain changes in the conditions of service in the native army were introduced, which, briefly summarized, amount to the following—viz., that the native infantry regiments of the three presidencies should be linked together in regiments of three battalions each, with the exception of a few corps which would be linked together in regiments of two battalions each (Gurkhas only), and that from a certain date in that year all enlistments in any battalion would be made for both or for all three battalions of the regiment, it being understood that the transfers to which men might thus be liable would only be enforced in the event of war.

The object of this measure was to ensure the making up of the strength of a battalion warned for field service to 1,000 effective rank and file by transfers of men from the other linked battalions, the vacancies thus caused in the other battalions being simultaneously filled up by further recruiting.

At the same time that this measure was introduced the formation of a system of reserves was also sanctioned. This system was only introduced as a tentative measure in the infantry of the Bengal army and the Punjab

frontier force, but was extended in 1887 to Madras and Bombay. The terms were, briefly, that two classes of reserve should be formed, namely, an active reserve and a garrison reserve. The active reserve was to be formed of men who might be transferred to the reserve after not less than 5, or more than 12, years' service with the colours, their numbers being limited per battalion for Bengal to 218, and for Madras and Bombay to 160. The garrison reserve was to be composed of men who have been pensioned after 21 years' service, or who have completed a total colour and reserve service of that period, number unlimited. The active reserve was to be embodied for one month each year and the garrison reserve for one month every alternate year. The former was to be liable to serve beyond the limits of British India as well as within those limits; the latter not to be liable (without consent) to serve beyond those limits. The arms of the active reserve were to be kept with the battalion headquarters, but no arms were to be issued for garrison reserve, for whose training only the spare arms in regimental charge would be utilized—viz., arms of men on furlough, sick, &c.

These arrangements have not as yet produced much fruit. The idea of service on the conditions offered was a novel one for India, and it is not to be wondered at if our first essay should not at once have proved successful. The difficulty seems to lie in superadding to what is essentially a long service system one for the maintenance of reserves. The situation appears to offer some analogy to that existing in England in 1859 and 1867, but the future solution of the problem may prove quite different from that devised for the • United Kingdom.

5. *Administration of the Army in India.*

By the Governor-General and Council.—No better definition under this heading can be given than the following, quoted from the chapter in the report of the special commission of 1879 on the military administration of India.

“The superintendence, direction, and control of the whole civil and military government of India is vested by certain Acts of William IV. in the governor-general in council. By a section of the same Act, the governor-general in council is invested with full authority to superintend and control the governments of the minor presidencies in all points relating to the civil or military administration of the said presidencies respectively, and the said governments are bound to obey such orders and instructions in all cases whatsoever. The governor-general in council, therefore, is the supreme head of the army.”

Under the head of “departments” the various independent

departments and offices of the government of India at Simla and Calcutta have been shown, and these, together with the army headquarters in the Bengal presidency, the similar departments of the governments of Madras and Bombay, and of the army headquarters of those presidencies, carry on the military administration of India.

So far as the issue of the orders of the governor-general in council is concerned, the business of the army in India is conducted through the agency of the secretary of the military department. The head of this department is the military member of council, who is the adviser of the viceroy in the military department, and is responsible to him for its efficient working. The secretary takes his orders from the military member of council. The military department of the government of India corresponds with the adjutant-general and quartermaster-general, and conveys the orders of the government to the commander-in-chief through those officers. It also corresponds with the Madras and Bombay governments¹ in regard to their armies, with the "resident" at Hyderabad for the Hyderabad contingent, with local corps under the government of India through the foreign department,² and with the home department on civil or ecclesiastical matters relating to the army. This office also comprises the consulting naval officer to government.

It will thus be seen that the supreme power of government must be responsible for the military administration, and the commander of the forces be responsible to that power for the executive command of the army. The military department of the government of India is the ministerial agency through which the authority of the Governor-General in Council is administered. The department is in charge of a member of the government (the military member of council) whose functions are ministerial, and to whom the Governor-General delegates powers to deal with, or submit to him, the military business which comes under the cognizance of the government.

By the Commander-in-Chief in India and Staff.—The Commander-in-Chief in India is the chief executive

¹ This passage, together with others in this chapter descriptive of the organization in three armies, Bengal, Madras, and Bombay, has been left as written. It is known that a reorganization is about to be effected, under which this division by presidencies will disappear; but a knowledge of the constitution of the army, as it has existed during so long a period of time, will be useful, if not necessary, for many years to come.

² Indian government foreign office, &c., should not be confounded with the imperial offices under these titles.

officer of the army, and works under the administrative control of the Governor-General in Council. Though not obligatory by law, the commander-in-chief in India has hitherto been appointed a member of council. The Special Commission on Army Organization, 1879, proposed to abolish this custom, but their recommendations in this respect were not carried out.

There being no so-called war office in India it may be well to mention how the staff and departments of army headquarters under the commander-in-chief are subdivided.

The office of the commander-in-chief is under the military secretary. Outside it, but under the commander-in-chief, is the department of the adjutant-general which includes the inspector-generals of cavalry and of artillery, the assistant adjutant-general for musketry, and the inspector of gymnasia. The quartermaster-general's department includes the assistant quartermaster-general (head of the intelligence branch) a deputy-assistant quartermaster-general for mobilization, and the inspector of army signalling. The other departments are the medical (see page 464, *quid* the troops), judge advocate general's, veterinary, and military education departments.

The commanders-in-chief of the Madras and Bombay armies are subordinate to the commander-in-chief in India, who, by the terms of appointment, has also the special command of the Bengal army.

Relations of Government of India to Secretary of State.—Consequent on the transfer of the government of India from the Company to the Crown in 1858, the court of directors and board of control ceased to exist, and the supervision of Indian affairs was vested in a Secretary of State with a Council. This council consists at present of a vice-president and twelve members, selected for their special qualifications and experience either as former commanders-in-chief of India or of presidencies, lieutenant-governors of provinces, chief justices of presidencies, &c. The Governor-General of India in Council submits measures of imperial interest to the Secretary of State and his council, for final decision.

6. *System of Preparation for War. Defences. Arms.*

The Report of the Special Commission on Army Organization, 1879, is the most important and carefully worked out production since the Royal Commission, 1858, which introduced

the new system after the Mutiny. Effect will be given to many of the recommendations of the special commission in the reorganization now contemplated, reference to which has already been made.

As regards mobilization a scheme based on the English plan of detailing troops according to the stations they occupy has been instituted.

With regard to the efficiency of the army in India for service it is only necessary to allude to the frequent opportunities afforded for practising itself in the art of war in peace time at the many camps of exercise and manœuvres which take place each cold weather. The country in India, owing to the vast extent of ground over which manœuvring can take place, is in general infinitely better adapted to the movement of large bodies of troops than would usually be the case in European countries, and the amount of annual expenditure on these camps may be taken as a proof of belief in their efficiency. The brigading of British and native infantry battalions under one command, the splendid show of cavalry at their special camps, and the special artillery camps of exercise recently instituted all tend to increased experience in each branch. At no time in the history of India, it may be said, has anything approaching the present condition of efficiency of all arms in time of peace been attained.

During the past few years immense strides have been made in the defences of India, both frontier, coast, and internal. The policy of defence has been actively pursued under the viceroyalty of Lord Dufferin, and carried on by his successor, and that which has been accomplished is remarkable, and should be a source of congratulation, considering the brief space of time that has elapsed since the project of erecting works of defence for the protection of the empire was first seriously undertaken.

The question of military railways has not been entered into here, but it may be said generally that the communications of India have been improved equally with the defences.

At the present moment a sufficient number of rifles of the improved Lee-Metford pattern have been received in India to enable the entire British infantry in that country to be re-armed, and the volunteers will shortly also be in possession of this valuable weapon. This will enable all native troops to be armed with the Martini-Henry. The small arm ammunition factories have already been fitted up with all necessary appliances for the manufacture of the new ammunition.

7. *Supply of Officers.*¹

Before the reorganization of the native army, which took place after the Indian Mutiny, there existed two kinds of regiments, the "regular" and "irregular." The "irregular" were commanded by three selected officers; the "regular" were supposed to be officered in a manner similar to that obtaining in British regiments, that is, with European company officers, but, in point of fact, owing to the withdrawal of a large number of officers for civil employ, the establishment in officers of any one regiment was most defective, and the whole system unworkable.

After the Mutiny, the irregular system, with some increase in the numbers of British officers, was adopted throughout the army in Bengal; and, later, in Madras and Bombay also. On this change being made all the officers who were willing to leave their old cadres were placed on the list of a staff corps, established on the recommendation of Lord Hotham's Committee. The scheme of this corps is that it provides a seniority list of all officers, with a view to their promotion after a defined number of years' service in each rank.

There is now a fixed number of officers for cavalry and infantry regiments, and in the event of an officer being withdrawn for civil employ, or even seconded in his regiment for staff employ, the vacancy is at once filled. In this way the defect attending the old "regular" system has been

¹ See chap. xviii.

eradicated. By the latest organization the establishment of European officers of regiments of native cavalry and infantry is as under:—

<i>Cavalry</i> —	{	1 commandant (usually lieutenant-colonel).
		4 squadron commanders (usually majors and captains).
<i>Total 10</i>	{	4 squadron officers (usually lieutenants, one of whom is adjutant).
		1 medical officer.
<i>Infantry</i> —	{	1 commandant.
		2 wing commanders.
<i>Total 9</i>	{	5 wing officers (one of whom is adjutant and one quartermaster).
		1 medical officer.

The great principle, which it has been endeavoured to preserve and apply to the whole native army, is that none but selected and approved British officers should be appointed to serve with it, and these in such numbers only as should insure that each British officer with a native regiment should occupy a position of importance and some dignity. Through this system the position and influence of the British officer is maintained while scope is left for the aspirations of the native officer. In the language of Sir W. Mansfield (Lord Sandhurst) each appointment to a native regiment was to be considered in the light of a staff appointment, *i.e.*, one made by special selection. It is difficult on a campaign, when losses among officers are heavy, to keep up the supply of officers; nevertheless, the importance of maintaining the prestige of the position of the officer during the long years of peace is great, and the principle above stated should always be kept in view.

The *Staff Corps* is composed of:—1st, officers employed exclusively in soldiering with their regiments; 2nd, officers in civil employ (to be dealt with later).

For employment on the actual staff of the army in India, officers of the British service are equally eligible with officers of the staff corps.

When the staff corps system was originally introduced in 1861, it provided a separate list for each presidency, and officers were classed as belonging to either the Bengal, Madras, or Bombay staff corps. After thirty years this has

been abolished, and by a royal warrant issued in January, 1891, the three staff corps were amalgamated under the general designation of Indian Staff Corps. All officers are now eligible for staff employ or commands in any of the three presidencies, provided the government of the presidency concurs in the transfer. An officer, however, would usually remain throughout his service with the army of the presidency to which he was originally posted.

Up to this time also, the method of original appointment to the staff corps had been through the British service, *i.e.*, an officer of either British infantry, cavalry, or artillery was eligible for the staff corps up to certain limits of age, and on his application was appointed as a probationer to a cavalry or infantry regiment of the native army. After passing an examination in languages, as also the staff corps professional examination, he was permanently admitted to the staff corps and his name removed from the British list. Originally, only officers serving with British corps in India were eligible for the staff corps, but eventually the privilege was extended to a limited number of officers who might be serving out of India. The existing rules for admission are shown in Chap. XVIII.

As has been stated, the staff corps consists of two elements—the military and the civil.

Each of these classes can be considerably subdivided—the first comprising all strictly military appointments, such as regimental officers, officers employed in the military departments of the government of India—*viz.*, accounts, commissariat, transport and army remount; officers employed on the personal staff, or on the staff of the army, including the district or station staff, military education, army clothing, &c.; and the second, or civil class, comprising what are termed military civilians, such as commissioners, deputy and assistant commissioners, &c., who fulfil duties corresponding to those performed by officers of the Indian or uncovenanted civil service, as judges and magistrates (usually in the Punjab, Burma, and Assam only), and the political and

diplomatic appointments, such as resident or assistant resident at a native court, and in the police department. All these are practically civilians, who never revert to military duty, though retaining their military rank, which is accorded to them in the same way as to all other officers of the staff corps, *i.e.*, by promotion to captain after 11 years' service, major after 20, and lieutenant-colonel after 26. They receive civil rates of pay, come home on furlough under civil rules, and only on retirement become once more *en* a par with their *confrères* of the staff corps by receiving the same pension.

8. *The Indian Military Establishment as a Force for War¹ outside India as well as for India itself.*

X Not only British regiments from India, but also native troops have frequently been used for military operations in neighbouring countries: they have then come under the orders of the home government.

Thus, in 1801 an army from India co-operated in the expedition to Egypt, and in 1810 and 1811 in the expeditions to Mauritius, and to Java.

In 1842 India furnished the China expeditionary force, consisting of 4 regiments of European and 6 regiments of native infantry, with artillery, engineers, and all the staff of the army.

In 1856-7 the Persian expedition, and in 1860 the force sent to China, acting conjointly with the French army, were largely Indian; and there have been other instances, notably the Abyssinian expedition in 1867; Perak in 1872; the despatch of Indian regiments to Malta in 1878; and to Egypt in 1882, to the extent of a cavalry brigade of three native cavalry regiments, 1 field battery, 1 mountain battery, 2 companies of Madras sappers, 1 infantry brigade of 1 British and 3 native battalions, and 1 reserve brigade of 1 British and 2 native battalions.

In 1885 there were sent to Suakin from India 1 native cavalry regiment, 2 companies of Madras sappers, and 3 battalions of native infantry; and, in the same year, to Egypt, a fully organized transport corps of 2,000 camels in 4 divisions of 500 each.

On the occasion of the expedition to Egypt in 1882, the Indian Contingent, in presence of a large circle of observers of different nations, came prominently under notice, and the esteem in which the Indian army is held was augmented.

¹ See chap. xviii.

CHAPTER XXVII.

COLONIAL MILITARY FORCES.¹

ANY description of the military forces of the empire would be incomplete without a notice, though it must be a brief one, of the colonial forces, more especially as the patriotic efforts made by the majority of the colonies in the direction of organizing their local forces and defences are perhaps not sufficiently understood either at home or in the other parts of the empire.

During the last fifty years the colonies have made a steady advance in wealth, trade, population, and good government, and the greater of them—the self-governing countries which for want of a better accepted name we continue to call Colonies—are rapidly assuming the position of Great States of the Empire. Far, however, from showing any weakening of attachment to the parent country, their aspirations are still to remain an integral portion of the empire, recognizing its interests as common interests and accepting their share of its responsibilities and dangers. With loyalty they have acknowledged that imperial defence entails mutual obligations and that while on the one hand the colonies have a real and genuine self-interest in the shield that the imperial flag throws over them, on the other hand they should where possible bear their fair share of the distribution of the burden from which both they and the empire derive benefit.

As the true principle of imperial defence—viz., that the sole condition of the existence of our extensive colonial empire is our superiority at sea, began to re-assert itself in late years, it was seen that the military resources of England would be severely taxed in supplying the garrisons of the strategic ports, and coaling stations vitally necessary for the requirements of our navy and the safety of our merchant vessels,

¹ Map No. 2 serves to illustrate this chapter. See note p. 492.

and that in the case of the larger colonies the responsibility for their land defence against insult and injury must mainly rest with the colonies themselves. The House of Commons accordingly resolved, in 1862, "that colonies exercising the right of self-government ought to undertake the main responsibility of providing for their internal order and security and ought to assist in their own external defence." These colonies accepted this principle, and a large number of imperial troops were thus set free from Australia, New Zealand, and Canada.

Since then the colonies have done much to organize and develop their local forces and provide defences for their coasts.¹ In Australia and New Zealand the principal ports have been placed in such a position of defence with works and armaments of the latest modern type, as to afford secure bases from which the powerful squadron now maintained in Australian waters, at the joint expense of the colonial and home governments, can operate in case of need. Thanks to the assistance of the home government in allowing the services of qualified officers and non-commissioned officers, to the interest and energy displayed by the colonial governments, and to the generous disposition they have always shown to profit by well-directed advice, these forces are now in most cases so efficient as to have become capable in the case of Canada and Australia not only of defending their own shores, but of volunteering to supply valuable contingents of troops to aid the mother country when hard pressed. The patriotic action of Canada and Australia in offering contingents during the apprehension of war in 1878, and the actual despatch by Australia in 1885

¹ At Esquimalt, Thursday Island, King George's Sound, Hong Kong, Singapore, Colombo, Mauritius, and Cape Town, the modern armaments were given by the Imperial government, while the cost of the works (with a slight exception in the case of Cape Town) was wholly borne by the Colonial governments concerned. In all other cases, excepting of course the "fortresses" and the purely naval strategical ports of Trincomali, Simon's Town, Sierra Leone, St. Helena, Port Royal (Jamaica), and Port Castries (St. Lucia), where the entire cost of the defences was naturally an Imperial charge, the modern armaments as well as the works were liberally provided by the several Colonial governments.

of a well-equipped contingent to Suakin, made a deep impression on the public mind and was practical proof of the progress of their military organization.

The primary and essential principle on which the system of imperial defence is based is our naval supremacy at sea, and on this postulate broad principles have been formulated by the home government for the guidance of colonies in fixing the standard of their defensive measures.

It has thus been laid down that while the imperial fortresses as well as the principal coaling stations may become the object of serious attack, the case is wholly different as regards the majority of the colonies. In their case no great military object, exerting an influence on the course of a war, would be obtained by their capture whilst the navy was in command of the sea; any attempt at occupation or territorial aggression must be made by a squadron accompanied by transports carrying a land force with all its necessary equipment and starting from a European port; an expedition of this class could hardly be prepared without exciting notice, and it would be the special object of the navy to frustrate such attempts. It is therefore unlikely that any serious attempt at occupation could be successfully carried out by any enemy. At the same time naval superiority could not entirely prevent the action of fast cruisers of considerable coal endurance. Such vessels might be able for some months to keep the seas, and might make brief raids on unprotected ports to obtain requisitions of coal, money, or supplies. Ships of war of this class, however, carry comparatively little ammunition and would hesitate about expending ammunition on bombardment at a distance from their base of supplies, as there would be the possibility of their being obliged to fight one of H.M. ships while in a state of partial disablement, or short of ammunition. Again the available landing party even of a squadron in modern days is weak, and to attack with such a landing party would in most cases be merely to court disaster. It is against such raiding attacks by a few cruisers, at most, that defensive precautions should be adopted, and these need

entail no very heavy burdens. As regards the local forces to be maintained, what is required is a sufficient garrison to man the coast defences, maintain internal order, and meet the minor land attacks that alone seem probable. Insult and loss would be thus effectually prevented. The conditions of enrolment of these forces should be the subject of ordinances passed by the local legislatures, and be those most suited to the conditions of the colony.

This standard of defence was gladly welcomed by the colonies who had been suffering from a plethora of conflicting advice. They at last had a definite scale to work to and at once put it in practice.

The colonies officially form three classes :—(a) The *self-governing colonies*, possessing responsible government, the home government having no control over any office except the governor; (b) Those possessing *representative institutions* but not responsible government, the home government retaining control of public officers; (c) *Crown colonies* where the Crown has entire control of legislation, and where the administration is carried on by officers under the direct control of the Crown.

There are ten self-governing colonies—viz., Canada, Newfoundland, the five Australian colonies, Tasmania, New Zealand, and the Cape. The three colonies, Bermuda, Gibraltar, Malta, with the naval port of Halifax, Nova Scotia, are generally known as the “four fortresses.”

Since 1870 the imperial troops have been gradually withdrawn from all the self-governing colonies, and now, with the exception of the garrison of the fortress of Halifax, and of Cape Town, the local defence of these colonies rests entirely on their own local forces. Of the other colonies,¹ Gibraltar, Malta, Bermuda, Cyprus, Mauritius, Natal, Sierra Leone, St. Helena, Ceylon, Straits Settlements, Hong Kong, Jamaica, and St. Lucia alone² still possess imperial garrisons, which in some

¹ Disregarding India and its dependencies which are dealt with separately, see chap. xxvi.

² Barbados still retains some detachments pending the construction of barracks at St. Lucia.

cases are supplemented by local forces. The effective total strength of the various local forces of all the colonies including permanent local troops, militia, volunteers, and armed police, was for the year 1891-92 about 91,000 men, the Canadian militia alone furnishing a force of 32,000 men.

The constitution of the colonial military forces is briefly as follows.

CANADA.

The Dominion comprises all British possessions in North America, except Newfoundland.

The local forces are administered by a Minister of Militia and Defence with a small permanent department, which is a branch of the civil government. The forces are under the command of a colonel or superior officer on the active list of the imperial service, appointed for five years, with the rank of major-general,¹ who is assisted by a permanent headquarters staff. X

The Canadian Militia Act (49 Vict., c. 41, sect. 79, sub-sect. 3) makes provision for the command in war. "Whenever the militia or any part thereof is called out for actual service by reason of war, invasion, or insurrection, Her Majesty may place them under the orders of the Commander of Her regular forces in Canada."² X

The country is divided into 11 military districts, to each of which there is assigned a district staff of permanently paid officers, consisting of a deputy adjutant-general, who commands the militia within the district, and, in nearly all cases, a brigade-major and a store officer.

The forces are divided into (i) permanent corps, (ii) militia, active and reserve.

The *permanent corps* are authorized to consist of—

2 troops cavalry.

3 batteries artillery (1 garrison, 2 part field part garrison).

4 companies infantry.

the total strength not to exceed 1,000 men.

These corps are enlisted for 3 years' continuous paid service, are officered from the military college, Kingston, and are trained up to the standard of the imperial regular forces in every respect. They serve as the nucleus of a regular force, capable of furnishing competent non-commissioned officers in

¹ Militia Act, 1886, sect. 37.

² See Army List. The Lieutenant-General Commanding; Headquarters, Halifax.

case necessity should arise for its expansion, and form 9 schools of instruction, located in different provinces, through which militia officers have to pass for appointment or promotion.

The *active militia* obtains men by voluntary enlistment for 3 years, but as, by the Act of 1886, every male Canadian between the ages of 18 and 60 is liable to service, men can be enrolled by ballot if the proper quota is not furnished by voluntary enlistment. The number of men to be drilled annually is limited to 45,000, and the period of training varies from 8 to 16 days. They receive pay for the period of annual drill and when otherwise called out.

Of the active militia the cavalry consists of 7 regiments, 2 squadrons, and 4 independent troops, or 45 troops in all: the artillery of 18 field batteries, 42 garrison batteries, and $\frac{1}{2}$ mountain battery: the infantry of 95 battalions of 639 companies (each of about 42 non-commissioned officers and men), 3 independent companies, and 3 companies of mounted infantry. There are 3 companies of engineers. The infantry are armed with Snider rifles. The established strength of the Canadian forces on 31st December, 1892, was 37,990 of all ranks; the actual strength was 31,810.

The *militia reserve* consists of all men (with a few exemptions) between the ages of 18 and 60, whether trained or not, who are not serving at the moment in the active militia. The strength of those who have at one time served with the colours is about 200,000.

There is a Royal Military College at Kingston from which, since 1875, 77 cadets have been gazetted to the imperial service.

There is an ammunition factory for S.A. ammunition, and projectiles for 9 pr. and 64 pr. guns, at Quebec; and a gunpowder factory at Hamilton, which produces powders to the standard of Waltham Abbey.

NEWFOUNDLAND has no local forces except a few armed constabulary, about 130 of all ranks. There have been suggestions at various times for raising a volunteer force, mainly for the defence of St. John's, but as yet nothing has been done.

AUSTRALIA.

The Australian colonies, including Tasmania, have all passed Defence Acts to regulate their military service. The volunteer system has in the main been abandoned and been replaced by the "partially paid system." Their forces are organized somewhat the same as in Canada,—viz., a small nucleus of permanent troops, mainly artillery, capable of expansion; a militia or partially paid force, with in some cases a militia reserve; and a small volunteer force. The military commandant, in most cases, belongs to the imperial service, as do most of the headquarters staff; it is an established

rule that these officers shall be fairly young men and the term of their appointment be limited to five years as guarantee for the whole staff being in touch with the progress of military science. The forces are chiefly concentrated about the large seaports.

Victoria.—The Victorian forces are administered by a minister of defence, who is a member of the Victorian cabinet. They are commanded by a military commandant, assisted by a headquarters staff consisting of an officer commanding artillery, an officer commanding engineers, a garrison instructor, all belonging to the imperial service, and an assistant adjutant-general.

The forces are enrolled under the Defence and Discipline Act of 1890. The discipline is as far as possible assimilated to the Queen's Regulations and the customs of the imperial military service, a high sense of honour and good feeling being inculcated in all ranks. X

The forces are (i) permanent, (ii) militia, (iii) volunteers, (iv) militia reserve.

The *permanent force* consists of headquarters staff, and permanent staff of the militia and volunteer regiments, the Victoria permanent artillery, and the permanent section of Victorian engineers.

Men are enrolled for five years with option of extending for a second period of five years. The age for recruits is 19 to 35 years, with special clauses for men who have been discharged not more than 12 months from the imperial service.

The *militia*, or partially paid force, are engaged for 5 years, of which 3 shall be in the militia, and 2 in the militia reserve, though, with the sanction of the commandant the last 2 years may also be in the militia, or the engagement may be further extended for 1, 3, or 5 years. The age for engagement is 18 to 35, with special clauses for men who have served previously in the imperial or other colonial forces. To be classed as an effective, each member must attend 2 drills per month, and a total per year of 3 whole days, 15 half-days, and 24 night drills, including the prescribed gunnery or musketry courses; no officer or man who fails to become an effective is allowed to remain in the force. Payment, up to a maximum limit, is according to attendance at drills. The average pay of gunners and privates comes to about £12 per annum, of officers from £24 to £60. If called out for active service, privates would get 6s. a-day and free rations. In addition the officers commanding corps are credited with an annual capitation grant of 50s. per effective for maintenance of clothing, &c.

The militia consists of 1 troop cavalry, 1 troop horse artillery, 3 field batteries, 7 garrison batteries, 1 company submarine miners, and 1 field com-

pany engineers, 1 regiment infantry of 2 battalions of 4 companies each, and 2 regiments, each of 1 battalion of 4 companies; total, 16 companies; also ambulance corps, commissariat and transport corps, and medical staff corps. The infantry are armed with M.-H. rifles. The men are of fine physique, none being enrolled except those of certified medical fitness.

The *volunteers* consist of 11 companies mounted rifles, and 10 companies Victorian rangers. Volunteer detachments varying from 16 to 20, as a minimum, can be formed in the different districts on certain conditions. Engagement is for a period not exceeding 3 years, with power of re-engaging for a further period of 1, 3, or 5 years. Age, 18 to 35. Unless they attend the prescribed drills they are struck off the strength. They get a capitation grant of 30s. to 40s. per effective, and also compensation for attendance at Easter camp.

The *militia reserve* consists of men who have completed three years' service with the militia, or who, after one year effective service with the militia, have been transferred by sanction of the military commandant. They receive in the reserve a retaining fee of £3 a year if effective, and £1 bonus for attending the four days Easter training. To be classed as effective they must attend the four days Easter training, or its equivalent, and go through a course of gunnery or musketry of three half-days and three night drills. Any non-effective is discharged. The men in the reserve are shown separately in all the returns of their particular corps; their number must not exceed what is required to fill the corps up to war strength.

Officers are appointed on probation for six months, during which time they must pass specified courses. They have to qualify in other courses for each step in promotion; special facilities are afforded to officers of artillery and engineers to attend courses in England.

The established and actual strength of all ranks of the Victorian forces on 31st December, 1892, were—

	Established.	Actual.
Permanent forces	400	403
Militia	3,282	3,628
Volunteers	2,565	2,320
	<hr/>	<hr/>
Total ..	6,247	6,351
	<hr/>	<hr/>

In addition to the foregoing there are a number of rifle clubs which are more or less affiliated to the local corps.

New South Wales.—The forces are under imperial officers as commandant and staff, who are responsible to the New South Wales government, and are as follows:—

(i) Permanent troops, (ii) partially paid volunteers, (iii) volunteer reserve. There is also a small naval brigade of 348, of all ranks.

The *permanent* troops consist of the headquarters staff and the permanent staff of corps, 1 battery field artillery, 3 garrison batteries, 1 company submarine miners, 1 company medical staff corps.

The *partially paid* volunteers comprise 8 troops cavalry, 9 batteries artillery (of which one is a field battery), 2 companies engineers, 2 com-

panies submarine miners, 8 companies mounted infantry, 4 regiments infantry of 10 companies each, 1 company medical staff corps, 1 company commissariat and transport.

The *volunteer reserve* consists of some 2 volunteer infantry and 91 rifle companies.

The actual strength on 31st December, 1891, was—

Permanent troops	..	..	..	647
Partially paid corps	..	..	..	4,210
Reserve	..	..	..	5,107
Total				<u>9,964</u>

The infantry is armed with M.-H. rifles.

The men are enrolled under the Volunteer Act; there is no difficulty in getting the desired numbers. The partially paid corps have to attend 9 days continuous training, and 3 detached days, and in addition 13 to 22 half-days drill in different courses. The reserves attend 12 day and 20 night drills, and a course of musketry biennially. The rifles must fire 60 rounds annually.

The whole organization is at present (1893) somewhat in a state of transition pending reorganization, in accordance with the recommendations of a commission, which will assimilate it more closely to the Victorian forces. The future establishment recommended is:—

Permanent troops	..	..	..	469
Partially paid corps	..	..	..	5,154
Reserve	..	..	..	4,200
Total				<u>9,823</u>

Queensland.—The Defence Forces Act of 1884 renders all males of ages from 18 to 60 liable to service, but owing to the high military spirit of the colony there has as yet been no necessity to enforce it. The forces are under a commandant aided by a headquarters staff, mostly retired officers of the imperial service. The country is divided into three military districts, the northern, the central, and the southern.

The forces consist of (i) permanent troops, (ii) militia or partially paid corps, and (iii) unpaid volunteers. The normal establishment was fixed by the amended Act of 1891, as follows, and the actual strength is practically equal to the establishment:—

The *permanent forces* to consist of the permanent staff and two batteries of garrison artillery, the latter to include a section of submarine miners. A detachment of these batteries is stationed in each district, and at Thursday Island.

The *militia* to consist of 2 field batteries, 4 garrison batteries, 4 regiments of infantry, and 4 independent companies, (30 companies in all), 11 corps of

mounted infantry (15 companies in all), 1 company engineers and a submarine mining section, 3 companies ambulance corps.

The *volunteers* to be 3 regiments infantry, 15 companies in all. An additional company is in course of formation. There are also 15 cadet corps and a number of rifle clubs.

The infantry is armed with M.-H. rifles. The average annual training of all arms and corps is 96 hours, including 8 continuous days of 6 hours each training in camp.

With this efficient and systematic organization the Queensland forces promise to compare favourably with those of Victoria.

South Australia.—The forces are very similarly constituted but get a lower rate of pay and less training than in Victoria, New South Wales, or Queensland, and this fact has apparently militated against their attaining the same degree of efficiency as the forces of those colonies, though the material is equally excellent.

The Defence Forces Act of 1886 authorizes the Governor in Council to raise an *active militia* of 1,500 men, a *reserve militia* of 1,000, and a force of *unpaid volunteers*. It also gives him power to call out by ballot in case of emergency a reserve militia of such force as may be necessary.

The *active militia* has 2 troops cavalry (lancers), 1 field battery, 1 garrison battery, 3 battalions infantry, of 12 companies in all, and a cadre for ambulance corps and medical department. There are no engineers.

The *militia reserve* is practically non-existent.

The *volunteer force* has infantry and mounted infantry, dispersed in the country districts.

The infantry is armed with M.-H. rifles. The average number of days training in the year is 36 to 40 for militia, and 25 to 40 for the volunteers. The force is mainly concentrated about Adelaide. It is under a commandant, who is an imperial officer, assisted by a headquarters staff.

West Australia.—The forces are still entirely volunteers enrolled under the Volunteer Regulations Act of 1883.

There is 1 field battery and 8 companies of infantry. The infantry are armed with M.-H. rifles. Twelve parades and the expenditure of 40 rounds at target practice in the year entitle to capitation grant.

West Australia is the youngest of the Australian colonies. As its population increases it will no doubt acquire an improved military system on a par with the other colonies of Australia.

Tasmania.—The forces are enrolled under the Defence Act of 1885, which if enforced to full extent would give some 30,000 men.

The *permanent* force consists of headquarters staff and instructional staff and a small force of garrison artillery. The remainder are all *volunteers*,

though with the exception of the rifle corps they are styled *unpaid militia*. They include 3 companies garrison artillery and a torpedo corps.

The commandant and headquarters staff are retired imperial officers. The infantry is armed with M.-H. rifles. The average annual training is 4 days in Easter camp, and 24 evening drills. The training for the rifle clubs is 14 drills. The forces are mainly concentrated about Hobart and Launceston.

The closer union of the Australian colonies for defence purposes by the federation of all the different local forces has been strongly urged, especially by Major-General Sir Bevan Edwards, who visited Australia in 1889, on a tour of inspection at the request of the delegates to the Colonial Conference in London in 1887. It is presented that it would be to the common advantage to assimilate the organization, training, equipment, and rates of pay, and to unite the whole under the command of an imperial officer who would inspect and advise in peace and command in war.

The importance of such a system of efficient inspection cannot be overrated. A uniform standard of efficiency would be established, and the organization would permit of easy transfer of troops from one colony to another. A definite gain of strength would so be obtained for defence.

The proposal also contemplates the establishment of a central cadet college on the same lines as the R.M. College of Kingston, Canada, and of a central ammunition manufactory.

NEW ZEALAND.

The *New Zealand* forces are enrolled under the Defence Act of 1886. They are administered by a Minister of Defence who is a member of the executive council. An imperial officer was appointed commandant at the invitation of the colony in 1892.

There is a permanent force of *paid militia* consisting of garrison artillery and a torpedo corps, together numbering about 200, with which the naval artillery volunteers would be combined in war time.

The remainder of the forces consists of *volunteers*. They form 17 companies naval artillery, 15 corps cavalry, 2 batteries garrison artillery, 10 batteries field artillery; 3 companies engineers, 68 companies rifles; there are also several cadet companies. The total of all ranks on 31st December, 1891,

was about 7,000. The field artillery has R.B.L. guns, and the infantry is armed with Snider rifles.

All get an annual capitation grant of £2 per effective, and the naval artillery volunteers receive in addition a personal payment of £1 if they pass in heavy gun drill and submarine mining drill. The volunteer force is popular and well supported by the New Zealand government.

It is probable that the forces will shortly be reorganized and that the present numerous small districts, of which there are 12 in North Island, and 9 in South Island, will be amalgamated into 4 larger districts.

CAPE OF GOOD HOPE.

An imperial garrison is maintained for the immediate defence of the Cape Peninsula, which includes Table Bay and the naval establishment of Simon's Town. There are also local forces for the general defence of the colony, which are administered by the Colonial Secretary, who is a member of the executive council, and are commanded by a commandant general assisted by a small staff. The Volunteer Act of 1882, and Regulations of 1885, provide for the enrolment of these forces, and extra forces can be raised on emergency by the Burgher Acts of 1878 and 1884, which render every able-bodied man in the colony between the ages of 18 and 50 liable to service.

The local forces consist of (i) permanent troops, (ii) unpaid volunteers drawing a small capitation grant.

Permanent troops :—Cape mounted rifles with field guns.

Volunteers :—Mounted frontier rifles, in which are included the Diamond Fields' horse of 6 companies and battery of guns, garrison artillery and engineers, and volunteer field artillery.

Of infantry, the volunteers have 17 corps, of 41 companies in all; the corps at Cape Town, Kimberley, and Port Elizabeth having 5 companies each, the rest varying down to 1 company. There are also 2 companies medical staff. Six drills every half year entitle to capitation grant. The infantry is armed with M.-H. rifles.

An improved system of mobilization is under consideration. The enforcement of the Burgher Act, would give a large additional force along the coast line from Table Bay to Saldanha, but the provision of officers as yet presents difficulties.

BECHUANALAND has a permanent force of 5 troops military police about 450 strong, mounted and dismounted, stationed at various points in the Crown colony and protectorate. The men are armed with M.-H. rifles, and a certain number are trained as artillerymen. The artillery *matériel* consists of 7-pr. guns and machine guns of various types. The force is highly efficient.

There is also a small corps of mounted rifle volunteers at Vryburg in the Crown colony.

THE FORTRESSES.

Gibraltar.—There are no local forces.

Malta.—Besides the Royal Malta Artillery (see p. 224), there exists the Royal Malta Militia regiment of 10 strong companies. The militia is armed with Martini-Henry rifles and the average number of days training in each year is 78. It is under the command of the general officer commanding. The island government contributes £5,000 a year to the cost of the garrison. X

Halifax.—Some thousands of the local Canadian forces already described under Canada are within easy reach of Halifax.

Bermuda.—There are at present no local forces, but their formation is under consideration.

OTHER COLONIES.

(a) *Ceylon*.—Imperial troops, towards the cost of which the colony contributes, are stationed at Colombo, Kandy, and Trincomali, and in the imperial garrison are included 2 companies Asiatic gun Lascars, and 1 company Asiatic submarine miners. These native corps are regularly enlisted. on
✓ the cost

The local forces are unpaid volunteers, and consist of artillery, mounted infantry, and infantry, all of mixed nationalities. Attendance at drill is voluntary. They are armed with Martini-Henry rifles. There is no law giving power to raise men on emergency.

(b) *Hong Kong*.—There is an imperial garrison, towards the cost of which the colony contributes. The local forces consist of a permanent armed police of whom part are Europeans, part Sikhs, and the rest Chinamen; and of volunteer artillery, part British, part Parsees. The British and East Indians are armed with Martini-Henry Rifles. The volunteers drill 2 days a week in the drill season. X

(c) *Mauritius*.—There is an imperial garrison, to the cost of which the colony contributes. There are no local forces except civil police. ,

(d) *The Straits Settlements*.—There is an imperial garrison at Singapore, to the cost of which the colony contributes. The local forces consist of volunteer artillery (British), with Maxim guns, and a body of police composed of Europeans and Sikhs armed with Snider rifles. Under Ordinance I of 1872 the governor is empowered to augment the Sikh police as may be required. Part of the Sikh police is at Penang. ,

(e) *Natal*.—Imperial troops are stationed at Pietermaritzburg and at Eshowe in Zululand. The local forces consist of—

Permanent troops.—The Natal mounted police—armed with Swinburne-Henry rifles and revolvers. The Zululand police (part mounted)—armed with Martini-Henry rifles.

Partially paid Volunteers, on somewhat the same footing as the partially paid forces of the Australian colonies. They consist of naval volunteers, mounted rifles, field artillery, and rifle volunteers.

(f) *Sierra Leone* has an imperial garrison. The only local forces are the armed frontier police composed entirely of natives of neighbouring tribes distributed throughout the colony and protectorate. They are armed with Snider rifles.

(g) The *Gold Coast* and *Lagos* have no imperial garrisons but have a local force of native constabulary divided into Hausa military police and civil police, enlisted for 6 years. In *Gold Coast* both divisions are being armed with Martini-Henry rifles and the Hausas have also field guns, machine guns, and war rockets. They are mainly posted at Accra, Elmina, and Kwitta. Ordinances of 1879 and of 1884 authorize any requisite increase. There is also a corps of rifle volunteers, lately formed, armed with Snider rifles, all natives. In *Lagos* the Hausa force is armed with Snider rifles.

(h) *St. Helena* has an imperial garrison but no local forces at present. There is a proposal to raise a local militia force of artillery and infantry on the island but nothing has yet been done. Both militia and volunteers formerly existed, but were disbanded in 1875. There is an amended Act of 1891 giving the requisite powers.

(i) *Cyprus* has a small imperial garrison, which really belongs to the Malta garrison. There is a small local force of native armed police, partly mounted. It is mainly stationed about Nicosia. It is armed with Martini-Henry rifles. By an ordinance of 1878 the high commissioner is empowered on emergency to augment this force. Additional men could easily be obtained from those on the island who have already served in the police.

WEST INDIES.

Until the appointment of the Royal Commission of 1879, the defence of the empire had never been considered as a whole, and defences and garrisons existing at various places were merely legacies of a period when both political and military conditions were widely different from those of to-day. This was especially the case in the West Indies where numerous small garrisons were scattered about affording no real protection and only inviting attack. The Commission recommended that these weak isolated garrisons should be withdrawn and be concentrated at such strategic points as would meet the requirements of the navy. In accordance with this policy it was resolved to fortify and maintain as coaling stations, Jamaica and St. Lucia, and that all the imperial troops in the West Indies should be concentrated at those two places. This did not mean abandoning the other West Indian Colonies to their fate, but was a policy based on the broad principle that their surest protection lay in the

efficient maintenance of naval strength in the West Indian waters. At the same time the colonies thus vacated by imperial troops were invited to consider what augmentation of their police or other local forces would be necessary to secure their internal peace and good order.

This policy has been carried out, and all the imperial troops are now concentrated at Jamaica and St. Lucia, except some detachments still left at Barbados, pending the construction of barracks at St. Lucia.

The provision of the extra local *personnel* for their own protection in the other West Indian colonies has been encouraged by the home government by grants of arms and equipment. It has mostly taken the direction of augmentation of the local armed police force, though in some cases a purely volunteer force has been raised, and volunteers under militia ordinance in others; in nearly all the islands old ordinances still exist giving power to raise a militia. A system has been proposed for an effective annual inspection of all such local forces by an imperial officer, and this would tend to stimulate them and improve their efficiency.

(a) *St. Lucia* has an imperial garrison but no local forces at present. There is a militia ordinance of 1854 which was in operation for 3 years, but it did not work satisfactorily. X

(b) *Jamaica*.—In addition to the imperial garrison there is a local volunteer militia of Jamaicans serving under the Jamaica Militia Act of 1879, amended by the law of 1891. It consists of garrison artillery, mounted infantry, and infantry. Recruits must be between the ages of 18 and 40, and of certified physical fitness. The period of service is three years with power of re-engagement. Boots, uniform, and equipment are provided free of expense. Fifteen drills per year are compulsory in addition to a course of musketry or gunnery. Privates are paid 2s. a day with free rations if called out for continuous training or active service. The capitation grant is 80s. per effective. The force is, for training and discipline, under the general officer commanding the imperial troops. The men are armed with Snider rifles. The amended law is gradually becoming better understood and promises to be popular. The force is mainly concentrated about Kingston. There is also a semi-military police organized on a somewhat similar system to that of the Royal Irish Constabulary. X

(c) *Trinidad* has a local force of unpaid volunteers and of armed police, both under a commandant, who is an ex-imperial officer, aided by a small permanent staff and instructional staff. The volunteers consist of field artillery, mounted rifles, and infantry. They are armed with Martini-Henry rifles. ✓

and Maxim guns, and the artillery with 16-pr. guns. The mounted rifles, No. 1 battery artillery, and about one-sixth of the infantry are Europeans, the remainder are Creoles and West Indians. Additional mounted rifles and naval artillery are being raised. The force is mainly located about Port of Spain. The police force is armed with Snider rifles. The volunteers are enrolled under a volunteer ordinance and drill twice a week. The men of the police are trained in infantry drill and some of them in gun drill.

(d) *British Guiana* has a force of volunteer militia, and of armed police, under the command of an inspector-general of police, who is an ex-imperial officer. There was formerly a Georgetown militia force of artillery and rifles, but it has not been embodied since 1870. The volunteer militia is divided between Georgetown, New Amsterdam, and Essequibo. The men are armed with Snider rifles, and drill twice a week.

(e) *British Honduras* has an armed police.

(f) *Barbados*.—The only local force at present is of armed police. There is a proposal to raise a militia force and to train the police, the whole to be placed under the command of an inspector-general of police, an ex-imperial officer, aided by an adjutant.

(g) The *Bahamas, Windward Islands, and Leeward Islands* have no local forces other than a few police, except *Antigua*, which, in addition to armed police has the nucleus of a militia force consisting of a small paid force of yeomanry cavalry and artillery militia, who have 12 compulsory drills annually.

CHARTERED COMPANIES.

The Royal Niger Company, British South Africa Company, Imperial British East Africa Company, and British North Borneo Company, have all their own local forces, consisting of armed military police.

There is also a small force of imperial Indian troops in Nyassaland under the Commissioner and Consul-General for the territories under British influence to the north of the Zambesi.

The following definitions will be found useful :—

An Imperial Coaling Station—is fortified, and is garrisoned by Imperial troops, with or without the assistance of local auxiliaries.

A Colonial Coaling Station—is fortified, and is garrisoned by Colonial regular troops, with or without the assistance of local auxiliaries.

A Naval Coaling Station—is fortified and maintained by the Navy.

A Defended Port or Harbour in a Colony—is fortified by a Colony for local reasons quite apart from Imperial considerations.

PART IV.

WAR,

CHAPTER XXVIII.

ARMY CORPS AND THEIR COMPOSITION.

1. *Introductory.*

THE army corps, as a war unit, is a child of the present century, and was born in the year 1800, when General Moreau first divided his army of the Rhine into *corps d'armée*. The necessity for those units has arisen with the increased size of modern armies in the field, and is well explained by Count von Moltke in the preface to the Prussian official account of the campaign of 1859 in Italy, in which he writes:—

“To direct 14 divisions of infantry and 2 of cavalry, 16 tactical units in all, by orders emanating directly from army headquarters is a task of great difficulty and one which presupposes extraordinary means of communicating orders and great activity, even for marches and operations only. In a battle, those 16 units would occupy a front of more than 8 kilomètres, which rarely could be overlooked from one point. A force of this strength must therefore necessarily have commanders intermediate between those of divisions and army headquarters.”

Again, Marshal Marmont, in his work entitled “*De l'esprit des institutions militaires*,” writes:—

“Armies should be organized by divisions and by reserves of each arm, at least small armies should be, for in large armies another *échelon* is required to ensure order and efficient action. This is attained by the organization of army corps, which are permanent commands midway between the divisions and the headquarters of the army. An army of 100,000 men composed of 10 or 12 divisions would be difficult to handle if it were not organized in army corps, for confusion would soon arise from the too considerable number of independent units to be manœuvred separately by orders from headquarters. The necessity of combining the divisions into higher units has therefore been felt, and, with a view to simplifying the

orders issued by the commander-in-chief, 2, 3, or 4 divisions have been united into an army corps."

2. *Historical.*

In the time of Frederick the Great, armies were still of a size which enabled them to be overlooked and commanded by one man, and, where a whole force was manœuvred as a review parade now is, commanders intermediate between the commander-in-chief and those of regiments, &c., were hardly necessary, though such were appointed. His armies were divided into an advanced guard, usually of light troops, and two wings, each formed of two lines composed of cavalry on the outer and infantry on the inner flank. The second line was usually weaker than the first, and was composed of selected battalions. In this formation the army marched, encamped, and fought. The artillery was divided into "battalion" or "regimental" guns, usually light pieces, attached permanently to the infantry units, and a reserve of heavier guns and howitzers, which was used in action where its services were most required. With small modifications this distribution of troops was preserved in the Prussian army, steeped in its Frederician traditions, down to the days of Jena, in which we still read of divisions of the right, left, and centre, &c., there being so far no units intermediate between them and the commander-in-chief.

The French Revolution had in the meantime brought in its train a revolution in the art of war, and one of the first steps taken by the leaders of the national armies was the organization of small mixed divisions of all arms, which were first introduced in 1793. They consisted, as a rule, of a staff and administrative services, two brigades of infantry, each of two demi-brigades (regiments) of three battalions, a brigade of cavalry of variable strength, and two batteries of artillery with from eight to twelve guns, the whole numbering from 10,000 to 15,000 men. As the strength of the armies increased, and as higher leaders became trained, these were formed into army corps of two to four divisions, and gradually the cavalry and artillery were withdrawn from the divisions

and formed into units of their own, which were in part placed directly under the commanders of army corps, and in part retained as reserves at the disposal of army headquarters. Thus in the campaign of Waterloo, Napoleon's force of just under 123,000 men was divided into six army corps, including the guard, and four corps of reserve cavalry. Each corps consisted of three or four divisions of infantry, composed usually of four regiments of two battalions, besides a division of light cavalry of three or four regiments, and five or six batteries of artillery, the guard being much stronger in artillery, its batteries forming the reserve artillery of the army. The four corps of reserve cavalry each consisted of two divisions of, generally, four regiments, besides two batteries of horse artillery. During the Napoleonic wars, the divisional and army corps organization, introduced by the French, was gradually adopted by all European continental armies.

The British army alone, down to 1815, continued to hold by its organization in divisions as the highest tactical unit, which, doubtless, was due to the small size of the army in the field at any one time and place, the number of divisions not being so great as to render leadership by orders difficult. In 1814, the Anglo-Portuguese army was organized in nine divisions of infantry, besides three unattached brigades, the usual composition (though with many exceptions) of each being two brigades of British or German Legion troops of three or four battalions, and one brigade of Portuguese of five battalions, besides one 9-pounder battery. No cavalry was attached to the divisions, the ten brigades of two or three regiments being independent, although they and three batteries of horse artillery were under the command of a general officer, while the reserve of artillery was formed by four batteries. In the Waterloo campaign the divisions were similarly formed, a Hanoverian taking the place of the Portuguese brigade, but the ten divisions, including three of Dutch-Belgian troops, &c., were formed into two army corps and a reserve, presumably as the number of units was found to be too great to

command direct without intermediate authorities. The cavalry still remained independently organized in brigades only.

On the conclusion of the Napoleonic wars, Prussia, Austria, and Russia retained permanently in peace the army corps organization, the necessity of which had been taught them by war. In the two latter states, this measure affected only the troops as to their *ordre de bataille*, but in Prussia, the territory of the kingdom was divided among the army corps, and the commanders of those units not only became the leaders of their troops in war, but the superintendents of their recruiting, training, and equipment in time of peace. France alone had no permanent organization of her troops, divisions and army corps being formed on the outbreak of war only, with what disastrous results we know from the campaign of 1870.

3. *Development of organization since 1815.*

To trace the changes of organization undergone by the higher units of European armies, from the Napoleonic wars down to the present time, would lead into too much detail, and therefore only the salient points common more or less to all armies can here be adverted to.

Infantry.—The highest unit composed solely of infantry has remained the brigade, which in Continental armies is, as a rule, composed of two regiments of two, three, or four battalions, and in the British army has generally consisted of three or four battalions, the latter of which is now the established number. In the Austrian army, in the campaigns of 1859 and 1866, a field battery was attached to each infantry brigade, but it must be noted that, in the latter of those campaigns, the Austrians had no intermediate unit between the brigade and the army corps, and after 1866 this distribution was abolished. In no army except the British have special transport companies, bearer companies, or field hospitals ever been attached to an infantry brigade, which is not considered as a higher independent tactical unit, and consequently is not expected to operate alone; these services

are only added in foreign armies to units which comprise all arms of the service, and consequently may be expected to carry out independent operations.

Rifle battalions.—These under various names are now the only remains of the light infantry, specially trained to skirmishing and outpost duties, as opposed to the infantry of the line (of battle) of last century. In Germany they have their *raison d'être* from their connection with the forest *personnel*, and in Austria, they are recruited in certain districts—generally mountainous—but in other nations special conditions of physique are the only requirements exacted. In all, however, except in the British army, a special training, and in particular, a higher musketry training is given to them. Up to within the last few years, the rifles were distributed uniformly throughout the army in the proportion of, in Italy a regiment of three battalions, and in Germany a battalion per army corps, in France and Russia a battalion per division, and in Austria a battalion per brigade of infantry; but of late years the tendency has been to group those picked troops into units of their own, to keep them at a high effective, and to station them on the frontiers to cover the mobilization of the rest of the army. In war they would support the independent cavalry divisions.

Cavalry.—Ever since the Napoleonic wars it has been the practice to divide the cavalry into two branches in war, namely, those units attached to others composed of all arms, and those forming, with horse artillery, special cavalry units. To take the former first, it has invariably been regarded that, for immediate protection on the march and support in action, it is necessary to have a force of cavalry permanently attached to the units of the other arms, and it is only the proportions which have varied. The German (Prussian) army has throughout the period under review, and in the wars of 1864, 1866, and 1870, had one cavalry regiment attached to each infantry division, and although in 1890 orders were issued as to the two regiments of a corps being formed into a brigade, they were cancelled in 1892. In France

the Napoleonic organization has been retained down to this day, and the infantry divisions are provided with cavalry as required from a force of that arm attached to the army corps. This force has been generally a brigade or a division—the latter in the war of 1870—of four to seven regiments, and is now fixed at a brigade of two regiments. Austria had in the campaigns of 1859 and 1866 only one cavalry regiment per army corps and still retains this organization, although the regiment is now divided amongst the divisions, a system which is followed also by Italy. Russia never has had cavalry attached to the divisions, and up to the present each army corps has generally been provided with a cavalry division of varying strength. In the British organization, adopted in 1875, a cavalry regiment was attached to each infantry division, but under the present organization only one regiment is detailed to the army corps and distributed among the divisions.

The cavalry not employed as above has in all armies been formed into independent units of its own, generally divisions, the strength of which has varied greatly. Up to 1870 it was usual to form separate divisions of light cavalry and heavy cavalry, the former for employment in front of the army on reconnoitring and screening duties, the latter retained as a reserve, as was the case in the Austrian army in 1866. In certain armies, notably the Prussian in 1866, and the Russian in 1828 and 1854, the reserve cavalry divisions were combined into cavalry corps. With modern views on the use of cavalry, the reserve cavalry has disappeared, and all cavalry not attached to mixed units is distributed into independent cavalry divisions, composed of all descriptions of cavalry, averaging 24 squadrons and two horse artillery batteries, and placed directly under the commanders of armies in the field.

Artillery.—As with the cavalry, so the field artillery also has usually been divided into units attached to the higher mixed tactical units, and intended to support them in action, and into separate bodies of artillery alone for special use. The tendency is constantly apparent to augment the

former. Thus in the German (Prussian) army, in the wars of 1864, 1866, and 1870, only four batteries were attached to each division, while now six are so detailed and many are of opinion that all the field batteries should be attached to the divisions. Italy in 1859 had two batteries in each division, France in the Crimea had two, and in 1870 three, including one mitrailleuse, but has now the same organization as Germany. Russia alone has throughout attached all her field batteries to the infantry divisions. The remaining batteries were formerly termed the "reserve artillery" and were attached usually to the army corps. Thus in 1859 France had a reserve of 3 or 4, and in 1870 one of 6 to 8 batteries in each army corps. Prussia in 1866 had a reserve of 4 to 6 batteries, and Austria in 1859 had one of 3, and in 1866 of 5 batteries. Thus we see that in these later wars the so-called reserve artillery was almost as strong as that attached to the infantry divisions, and this proportion was further increased by the army artillery reserve in certain armies, which in the Austrian army of the north in 1866, and in the French army of the Rhine in 1870, numbered sixteen batteries. Taught, however, by the ill-success of her artillery in 1866, Prussia revived the Napoleonic ideas on the use of artillery in masses, abolished the term "reserve artillery" as tending to confusion of ideas, styled all batteries not attached to divisions "corps artillery," and assigned to the latter a forward place in the line of march and a prominent rôle in action, as was seen in 1870. These principles have since been adopted by all nations except Russia, and in all armies about two-thirds of the batteries are now attached to the infantry divisions and one-third retained as "corps artillery."

Engineers.—These and other technical troops have in all nations been organized in companies only and attached to the higher units, generally in the proportion of one company to each division.

From what has been said above, it will be seen that throughout the period under review the composition of

divisions of all arms has undergone but little organic change, the components being usually two brigades of infantry, varying in strength from three independent battalions in Great Britain to two regiments of four battalions in Russia, in many cases with a battalion of rifles attached to one or other, a force of cavalry varying from a squadron to a regiment, two to six batteries of field artillery, and a company of engineers. Two to four of these divisions have constituted an army corps, to which have been also attached bodies of artillery, cavalry, and engineers placed directly under the corps staff and varying greatly in numbers. The general principle throughout this organization is that no commander should have more than two to four commanders of units under him, besides heads of various services, for, whatever else may vary, the average human powers of supervision and command do not, and as the whole system of organization of armies in the field is based on the idea that the army as a machine should be manageable by leaders who, though well trained, must be reckoned on as of average capacity and not geniuses, it follows that the machine in its parts should be designed so as to lend itself most easily to management. A leader of troops may be expected to impress his will on and to control two to four subordinates far more effectually than he ever would seven or eight. Each leader has to be attentive to the orders he receives or which circumstances require him to originate, as well as to exercise actual command, and it is an object of the highest importance that his time and energy should not be absorbed in watching details of execution to the prejudice of what are his higher duties—viz., the conception of that which is to be executed.

4. Comparison of present War Organization of European Army Corps.

The following table gives a summary of the present war organization of the army corps of the five great powers of the Continent, that of a British army corps being added for purposes of comparison:—

Units, &c.	Great Britain.	Germany.	France.	Austria.	Russia.	Italy.
Infantry Brigade	4 Bns. of 8 Cos. 2 m. guns.	2 Regts. of 3 Bns. of 4 Cos.	2 Regts. of 3 Bns. of 4 Cos.	1 Regt. of 3, and 1 of 4 Bns. of 4 Cos.	2 Regts. of 4 Bns. of 4 Cos.	2 Regts. of 3 Bns. of 4 Cos.
Infantry Division	2 Inf. Brigs. 1 Sqn. 3 F. Bties. 1 Am. Col. 1 Eng. Co.	2 Inf. Bdes. 1 Cav. Regt. of 4 Sqs. 6 F. Bties. 1 Eng. Co. with Bridge Tr.	2 Inf. Bdes. 6 F. Bties. 1 Eng. Co.	2 Inf. Bdes. 1 Rif. Bn. 3 Sqs. 3 F. Bties. 1 Inf. Am. Col. 1 Art. Am. Col.	2 Inf. Bdes. 6 F. Bties. 2 Inf. Am. Cols. 2 Art. Am. Cols.	2 Inf. Bdes. 4 F. Bties. 1 Am. Col. 1 Eng. Co. with Bridge Tr.
Army Corps	3 Inf. Divns. 1 Bn. with 2 m. guns. 1 Sqn. 2 F. Bties. 3 H.A. Bties. 5 Am. Cols. 1 Eng. Co. 1 Bridging Troop. 1 Tel. Bn. 1 Balloon Sect.	2 Inf. Divns. 1 Rif. Bn. 6 F. Bties. 2 H.A. Bties. 6 Art. Am. Cols. 4 Inf. Am. Cols. 1 Eng. Co. with Bridge Tr. 1 Tel. Sect.	2 Inf. Divns. 1 Rif. Bn. 1 Cav. Bde. of 2 Regts. = 8 Sqs. 6 F. Bties. 2 H.A. Bties. 6 Art. Am. Cols. 2 Inf. Am. Cols. 1 Eng. Co. 1 Bridge Tr.	2 Inf. Divns. 6 F. Bties. 2 Art. Am. Cols. 1 Inf. Am. Col. 1 Eng. Co. 1 Pioneer Co. 3 Bridge Trs.	3 Inf. Divns. 1 Cav. Divn. (see below). 1 Am. Col. 1 Sapper Bn. 1 Pontoon Bn. 1 Tel. Park.	2 Inf. Divns. 1 Rif. Regt. of 3 Bns. 1 Cav. Regt. of 6 Sqs. 8 F. Bties. 1 Am. Col. 1 Tel. Park.
Number of Units in Army Corps	25 Bns. 4 Sqs. 84 guns. 4 Eng. Cos. &c.	25 Bns. 8 Sqs. 120 guns. 3 Eng. Cos. &c.	25 Bns. 8 Sqs. 120 guns. 3 Eng. Cos. &c.	30 Bns. 6 Sqs. 96 guns. 2 Eng. Cos. &c.	22 Bns. 24 Sqs. 108 guns. 4 Eng. Cos. &c.	27 Bns. 6 Sqs. 96 guns. 2 Eng. Cos. &c.
Total Strength of Army Corps	1,158 Offrs., &c. 23,952 other ranks. 10,164 horses.	1,365 Offrs. 36,818 other ranks. 11,460 horses.	40,000 men. 12,000 horses.	909 Offrs., &c. 37,119 other ranks. 7,990 horses.	1,224 Offrs., &c. 47,465 other ranks. 16,983 horses.	981 Offrs., &c. 31,877 other ranks. 5,917 horses.
Independent Cavalry Division	2 Bdes. of 3 Regts. = 24 Sqs. and 4 m. guns. 2 H.A. Bties = 12 guns. 1 Am. Col. 1 Bn. Mtd. Inf. with 2 m. guns. 1 Mtd. Eng. Det. 227 Offrs. 6,378 other ranks. 6,664 horses.	3 Bdes. of 2 Regts. = 24 Sqs. 2 H.A. Bties. = 12 guns. 1 Det. Eng. in wagons. 241 Offrs. 4,485 other ranks. 5,055 horses.	3 Bdes. of 2 Regts. = 24 Sqs. 3 H.A. Bties. = 18 guns. 4,500 men.	2 Bdes. of 2 Regts. = 24 Sqs. 2 Rif. Bns. 2 H.A. Bties. = 12 guns. 1 Am. Col. 256 Offrs., &c. 7,496 other ranks. 5,885 horses.	1 Bde. of 3 Dragoon Regts. 1 Bde. of 1 Dragoon and 1 Cossack Regt. = 24 Sqs. 2 H.A. Bties. 12 guns. 183 Offrs., &c. 4,488 other ranks. 4,806 horses.	2 Bdes. of 2 Regts. = 24 Sqs. 2 H.A. Bties. = 12 guns. 1 Am. Col. 223 Offrs. 4,032 other ranks. 4,180 horses.

NOTE.—F. Bties. = Field Batteries; H.A. do. = Horse Artillery do.; m. guns = machine guns; sqn. = squadron.

5. *Detailed War Organization of a British Army Corps.*¹

Passing now to the organic constitution for war of the British army, it may here be first of all stated on what bases the transport provided has been calculated. There are carried:—

(1) *Ammunition.* For infantry (magazine rifle) 100 rounds in pouch, 65 rounds in battalion small arm ammunition carts, 20 rounds in baggage wagons, 77 rounds in divisional ammunition column, and 60 rounds² per rifle in the corps ammunition park. For cavalry (M.H. carbine) 30 rounds in pouch, 57 rounds in regimental S.A.A. carts, 20 in divisional ammunition column, and 10 rounds² per carbine in the corps ammunition park. For artillery (12-pr B.L. gun) 108 rounds per gun are carried by batteries, 74 rounds in the divisional ammunition column, and 72 rounds² in the corps ammunition park.

(2) *Rations.* There is carried by every soldier an emergency ration and the unexpended portion of his ordinary ration; in the regimental baggage, one day's groceries for current use; in the regimental supply wagons, one day's complete field ration; and in the brigade supply column, a second day's supply.

(3) *Forage.* Each horse carries the unexpended portion of his ordinary ration. The regimental supply wagons and the brigade supply column each carry one day's oats.

(4) *Fuel.* The regimental supply wagons carry 1 lb., and the brigade supply column, 2 lbs., per man. This is only for kindling purposes.

(5) *Tools, stores, equipment, and tents* (the latter only if required by the nature of the country).

It should further be remarked that, as shown in the "Field Army Establishments," two scales of equipment, for foreign service and for home defence, are recognized in the British service, the former more complete than the latter, as on home service troops would be in close communication with the railways and could therefore afford to dispense with much of what must be carried with them abroad.

An infantry brigade is commanded by a major-general and consists of a staff, 4 battalions of infantry, a detachment of infantry with 2 machine guns, a company of the army service corps, a bearer company, and, on foreign service only, a field hospital. The establishments of these and all units subsequently mentioned are given in the Appendix. The

¹ See tables in appendix.

² Not carried on home service.

machine gun detachment is attached to one of the battalions for discipline and administration, but its tactical employment is directed by the officer commanding the brigade. The army service corps company provides a small detachment for the supply duties of the brigade and furnishes transport for the brigade supply column, the baggage of the brigade staff, the bearer company, and, on foreign service, the field hospital also. The field hospital has stores for 100 beds.

An infantry division is commanded by a lieutenant-general and consists of a staff and two brigades as above, with, in addition, as divisional troops, a squadron of cavalry, a brigade-division of 3 field batteries, a divisional reserve ammunition column, a field company of engineers, a company of the army service corps, and a field hospital. The squadron of cavalry is intended to provide for the immediate safety of the division on the line of march, at the halt, and in action, and to furnish orderlies to general officers and their staffs. The brigade-division of artillery is commanded by a lieutenant-colonel who takes his orders from the commander of the division unless, by order of the commander of the corps, the batteries of divisional artillery are, for combined tactical action, placed under the officer commanding the artillery of the army corps. The divisional reserve ammunition column is under the lieutenant-colonel commanding the three batteries, and is primarily intended to convey the reserve of artillery and small arm ammunition for the troops of the division, but its contents may be made available on an emergency for any other troops. The engineer field company, besides its technical equipment, is provided with a certain proportion of bridging stores. The army service corps company performs the same duties as that attached to an infantry brigade, the supplies carried in its supply column being destined for all divisional troops.

An army corps is commanded by a general officer, and consists of a staff, three divisions of infantry composed as above, and corps troops. The latter are at the direct disposal of the general commanding, and consist of all arms. The corps

infantry comprises one battalion with two machine guns, which would usually be employed on detached duties. The cavalry is composed of the headquarters and the fourth squadron of the cavalry regiment distributed among the divisions, and is intended to reinforce the squadron attached to any of the latter when necessary and to furnish an escort and orderlies for army corps headquarters. The corps artillery consists of a staff and two brigade-divisions, one of three horse batteries and one of two field batteries, and to it also is attached an ammunition column to carry the reserve of artillery and small arm ammunition for the corps troops. The corps artillery is destined to reinforce any part of the battlefield of the corps where its services may be required, and is a means in the hand of the general commanding the corps for giving the required impulse to any desired course of action. On home service, the divisional and corps troops ammunition columns are filled up direct from the ammunition depôts, but on foreign service an intermediate line, the army corps ammunition park, of four sections, one corresponding to each ammunition column, is provided. The corps engineers comprise a field company, a bridging troop with 120 yards of bridge, half a telegraph battalion with 60 miles of air line and 20 miles of cable, a field park with reserves of tools, and, on foreign service only, a balloon section. For the transport of the baggage of the corps staff and that of the supplies for all corps troops, one army service corps company is provided, and in addition, on foreign service, a bakery column of 120 ovens, horsed by two companies of the army service corps, is also included in the corps details. Finally, two companies of signallers, one mounted and one dismounted, are provided to carry out field signalling duties, and, on foreign service only, one field hospital for the corps troops.

The following table shows the difference in the numbers of units between an army corps mobilized for foreign service and one mobilized for home defence :—

Units.		Service Abroad.	Home Defence.
Battalions of infantry	25	25	
Machine gun detachments	7	7	
Squadrons of cavalry	4	4	
Batteries, field artillery	11	11	
Batteries, horse artillery	3	3	
Ammunition columns or sections of ammunition park	8	4	
Engineer field companies	4	4	
Bridging troop	1	1	
Half telegraph battalion	1	1	
Engineer field park	1	1	
Balloon section	1	0	
Companies, army service corps ..	12	10	
Bearer companies,	6	6	
Field hospitals	10	3	
Signaller companies	2	2	

Cavalry.—For home defence, the brigade is the highest unit and is composed of 3 cavalry regiments, a cavalry detachment with 2 machine guns, a battery of horse artillery, a brigade reserve ammunition column, 2 companies of mounted infantry with 2 machine guns, a company of the army service corps, and a bearer company, a detachment of mounted engineers being attached, in addition, to one of the brigades.

For foreign service, however, the cavalry has a divisional organization, and the brigade is composed of 3 regiments, a cavalry detachment with 2 machine guns, a company and a half, army service corps, a bearer company, and field hospital. Of the army service corps, one company provides transport for the staff baggage and the supplies of the brigade, while the half company horses the vehicles of the bearer company and field hospital. If two army corps are in the field, an extra cavalry regiment is added to each brigade.

A cavalry division consists of two such brigades with, in addition, a brigade-division of two horse batteries, a divisional ammunition column, a section of the ammunition park, though this would not usually accompany the division, a mounted detachment of engineers, a battalion of mounted infantry with two machine guns, a company of

the army service corps for the divisional troops, and a field hospital.

Troops on the Line of Communications.— Besides the troops forming part of the army corps and cavalry division, there are provided a certain number of troops for duty on the line of communications. The detail of these must of course vary with the length of the line and the strength of the force, but, as a guide, the regulations lay down that when one army corps and a cavalry division are in the field and with a line of communications of 50 miles of railway and 50 miles of road, including a base, 6 stations, and an advanced dépôt, the approximate strength of the troops on it would be 4 battalions, each with 2 machine guns, 1 cavalry regiment, 2 field batteries, 1 fortress engineer and 2 railway companies, 5 companies of the army service corps, 2 general (400 beds) and 2 stationary hospitals (200 beds), besides dépôts, &c. The line of communications is under a general officer who is directly subordinate to the general officer commanding the army in the field.

From the above and a comparison with the table on page 501, it will be seen that the organization adopted for the British army in the field differs materially from that adopted in other armies. The first point which strikes one is the division of the army corps into three instead of, as in other armies, into two divisions, a circumstance which is held by many Continental writers to be a great advantage. The comparative weakness in cavalry and artillery of the British organization will at once be remarked. It is, however, in the non-combatant services, which are only partially shown in the table, that the differences are most apparent. In all other armies, artillery and small arm ammunition are kept apart in separate columns. The British organization relies for supplies on its line of communications and presupposes that the troops will not move more than one day's march from the advanced dépôt. Accordingly, carriage is only provided for 3½ days' (including emergency) rations, while in the German army transport is provided for 8,

and in the Russian for 12 days' rations. Again, the medical units with us are assigned to mixed units as low as brigades, while in foreign armies no unit lower than a division is provided with a bearer company, and generally the field hospitals are all at the disposal of the principal medical officer of the corps, who distributes them as required. Finally, the British army has four services—mounted infantry, mounted detachments of engineers, machine gun detachments, and signaller companies—which are not represented in any other European army.

CHAPTER XXIX.

MOBILIZATION.

1. *Introductory.*

THE problem of mobilization — or in other words the determination of the best method in which to place in the field part or the whole of the fighting forces of this country—has only been seriously attacked of late years. Until recently the plans for any foreign expedition were elaborated when the emergency arose, whilst, as regards home defence, the feeling of confidence which prevailed that Great Britain could never be seriously invaded—a legacy from the days before steam was invented—prevented any arrangements being made to meet such an emergency. But the development of military power on the Continent, and the evidence given by recent wars of the incalculable value of antecedent preparation have reacted on public opinion in this country, and the great advance that has taken place in sea transport and in the means of embarkation and disembarkation, has aroused an uneasy consciousness that the invasion of England is a less difficult operation than it was supposed to be. As a natural consequence, closer attention has been paid to the organization of our home forces for rapid action, with the result that not only has a complete system of mobilization been elaborated, but also that much progress has been made in the decentralization of stores and localization of equipment, necessary to make this system a working reality and not a mere paper scheme.

Although any mobilization attempted by England must of necessity be on a smaller scale than those of the great military powers of the Continent, the conditions under which it would have to be effected, and the requirements which would have to be met, are more complex and difficult than those obtaining for any other nation. In the first place our regular troops have no permanent resting-place, but are in a state of perpetual movement all over the world. Secondly, the heterogeneous nature and different conditions of service of the various military forces of Great Britain—of the regulars, the militia, the yeomanry, and the volunteers—make the difficulty of bringing them into line together exceedingly great. Moreover besides the complications arising from differences in *personnel* and *matériel*, in conditions of service, arms, equipment, training and general efficiency, further complexities occur from the fact that a mobilization scheme for Great Britain has to provide against two separate emergencies. On the one hand there is the “small war” with which we are so familiar, with some uncivilized or semi-civilized nation. For this an expeditionary force is required, not probably of great numerical strength, but with an equipment so complete as to make it independent of the country in which it is operating, for its food, its transport, and its munitions of war of every kind. On the other hand, is the contest in which we should have to put all our forces into the field, either to resist invasion or to take part in some great Continental struggle as the ally of one or other of the contending powers, a contest in which—whether at home or abroad—we might be certain of being able to supplement our purely military supply from the resources of the country in which it took place.

A mobilization scheme for this country therefore breaks up into two parts of unequal magnitude, the one concerned with the placing the whole of our land forces in the field in order of battle, the other with the organization of a small but well furnished column ready to proceed on active service at short notice, and equipped and adapted, as far as can be done

while the locality of the campaign is uncertain, for the particular kind of fighting which characterizes our small wars. Fortunately the greater, in this instance, to a large extent includes the less, and any organization which provides for the mobilization of our regulars, yeomanry, militia and volunteers, with the rapidity which would be required to resist invasion, can without difficulty be adapted to that of the much smaller force wanted for a colonial campaign. In the following paragraphs therefore the system of home defence mobilization will be first dealt with, since this embraces every other, and afterwards the modifications required in the case of a foreign service column will be described.

2. *Home Defence.*

Speaking very broadly it may be said that the main problems, which have to be determined in the case of a mobilization for home defence, are three in number, namely:—

1. In what manner can the mixed force of regulars, yeomanry, militia and volunteers, be best grouped together in fighting formations?
2. What is the best disposition of stores to ensure the war equipment being issued rapidly and without confusion, when required?
3. What are the best arrangements for calling up the reservists, and collecting and distributing registered horses?

These are the leading questions which belong to mobilization proper. Besides them, there is the further one of the best positions for the troops to concentrate on when mobilized, and the whole railway problem of their conveyance to the positions selected. This however is a matter rather of strategy than of mobilization, and will not be entered upon in this chapter.

Taking these problems in order, it is evident that in deciding on the manner in which our troops shall be drawn up in order of battle for home defence, we must in the main

be guided by two considerations. First, what are the requirements which we desire to have met—Secondly, how can we best allocate the *personnel* at command to these requirements, having in view the very dissimilar conditions which prevail among the forces at disposal? The requirements can be shortly enumerated. They are, the bringing up to war strength of the garrisons round our coasts so as to protect our ports and to deny to an enemy the easy acquisition of harbours which would form invaluable bases for an invading army; and the provision of a mobile or field army which could operate against an invading force which had disembarked at some favourable landing place on our shores. The mere enunciation of these requirements will show that the more highly trained troops and those with the greatest power of manœuvre must in the main be kept for the field army, whilst those of a more sedentary or, as until recently it used to be termed, “auxiliary” type, will be best assigned to the garrisons. And this course has accordingly been followed. Without going into the detail of the garrisons allotted to the different ports, it may be said that they are for the most part composed of militia and volunteers, and that only a very limited proportion of regulars has been left among them. The militia and volunteers for each garrison are, as far as possible, drawn from those existing in the port concerned, or in its vicinity. Our auxiliary forces have however grown up more in accordance with the energy and recruiting power of different localities than been raised on any definite system for the defence of our country, and while strictly territorial in their nature, they are by no means always to be found in the territories, where, militarily, they are most wanted.¹ In consequence, the militia and volunteers for the garrisons have not unfre-

¹ As an example of this it may be mentioned that the mass of our volunteer artillery will be found stretching in a band across England from Lancashire on the west to the coasts of Durham and Northumberland on the east, whereas it is needless to say that the places where it is most required are the great fortresses and dockyards in the south, such as Dover, Portsmouth, Plymouth, and Milford.

quently to be drawn from a distance, and in some cases from a very long distance; an arrangement, which, while clearly undesirable in itself, cannot be avoided under the peculiar conditions which obtain in the constitution of these forces.

The composition of the garrisons, therefore, has been determined on the following principles—the actual numbers required for each port and the proper proportions of the various arms and departmental services have been calculated with regard to the importance of the place, its armament, defensive works, and other similar considerations. This number has then been made up by allotting in the first instance a small nucleus of regulars, then by taking the adjacent militia and volunteers so far as procurable, and when these failed by drawing upon more remote districts. The result is to give for each garrison a somewhat heterogeneous assemblage of troops composed of excellent material, but, at the outset, certainly wanting in training and cohesion. After a month or so had elapsed it is probable that they would develop into a well drilled and efficient garrison force.

The troops for the garrisons being thus allotted, there remain the larger portion of the regulars at home, the yeomanry,¹ and a considerable part of the militia and volunteers. Out of these the field force has to be constructed, and it will be clear that this field force or home defence army, or whatever name it may be termed by, will not be in any sense that which on military or other theoretical principles would appear most suited for the task to be performed, but simply the best which can be constructed out of the material at command. This is undoubtedly true of other countries as well as Great Britain. No nation is able to put under arms precisely the army it would like to see in the field. But there is no nation, which can in any way be termed a military power, in which the organization of

¹ In a few cases, where it appeared desirable, some of the yeomanry are assigned to garrisons.

the army for field service is so much governed by pre-existing conditions of military service, instead of these conditions being themselves governed by that organization, as is the case in this country. In other nations the end to be arrived at, the particular military formation, whether army, army corps, brigade, or other fighting body required, has been largely influential in determining the nature and composition of the units to be maintained. With us, on the other hand, the various units have been brought into existence by circumstances apart, or mainly apart from military considerations, and the military formation has had to be shaped to meet their peculiarities. It is neither necessary nor desirable to go into the causes which have produced this result, but it is very necessary to draw attention to it in any description of the mobilization system for Great Britain.

Taking then the existing material, the various cavalry regiments, infantry battalions, batteries, engineer companies, &c., of the regulars, yeomanry, militia, and volunteers, which remain available after the garrisons have been made up, it has been found that the shape in which these can best be cast for a home defence force is to constitute them into a field army of four cavalry brigades and three army corps,¹ with behind them a semi-mobile force of 33 volunteer infantry brigades and 84 volunteer batteries of position. The four cavalry brigades and the 1st and 2nd army corps are (with the exception of some medical details) composed entirely of regulars. The 3rd army corps is made up of regulars, militia, and volunteers. The yeomanry is organized in brigades, and is attached to the various infantry brigades or divisions of the field army, and the medical details just referred to, which our regular medical staff corps is too small to furnish, are made up from the companies of the volunteer medical staff corps. The result of this arrangement is a composite

¹ The detail of these cavalry brigades and army corps will be found in the tables attached to the Mobilization Regulations.

field army backed by a homogeneous second line of partially trained auxiliaries.

After the above troops had been put into the field, there would still remain a small quantity of regular cavalry and infantry, some militia infantry, and some volunteer garrison artillery. Some kind of support to the civil power would be required in our larger towns when most of the ordinary troops had been removed, and at a time of great excitement and disturbance. It is to this duty that the regular cavalry and infantry outstanding are assigned, and it is in consequence of their being so required that they are not included with the field army. The militia infantry battalions and the volunteer garrison artillery would remain as a reserve for their own arms. The artillery companies cannot be utilized at first in our garrisons, inasmuch as on mobilization our volunteer garrison artillery is in excess of that required for the guns round our coasts, while the militia battalions cannot be organized into brigades or divisions on account of their consisting of infantry alone, and there being neither the artillery, engineers, supply, transport, nor medical services necessary to constitute a properly formed fighting body.

The above will serve to give a general idea of the manner in which it has been considered that the different land forces of this country can be best arrayed for the various requirements of home defence. Before leaving this subject, however, it may be well to mention that while the same corps of yeomanry, militia or volunteers would always go to the same posts in garrison, or in the field army, subject to any alteration in our arrangements, this would not be the case as regards individual units of the regulars. This arises from the fact that our regular units are not localized in the sense of remaining always stationed within certain districts, but are in a state of constant movement all over the world. To meet this difficulty, our organization, as regards the regulars, has to be built up on the stations which are permanent, and not on the units which are changing, or, to quote from the mobilization regulations for the regulars—

"Owing to the exigencies of service abroad the troops of the British army cannot be grouped together in fighting formations in the same manner as are those of other armies. It is not possible to lay down that an army corps shall consist of certain definite regiments, batteries, departmental units and the like, because if this were done it would be found, when this army corps had to be constituted on mobilization, that a large proportion of its component units were abroad. The organization of the fighting formations has therefore to be effected on the basis of stations and not of units, that is to say that a given formation, a brigade for instance, will not be made up of definite units, but of the units quartered at definite stations."

Such then is the general scheme on which the land forces of Great Britain are set in battle order for home defence. So far the arrangements described are purely paper work. They consist solely of the detailing of certain units to certain duties. But they are a necessary antecedent to any practical measures. It is clear that no satisfactory steps can be taken with regard to the provision or storage of war equipment for any troops, until it is known what is the nature of the work which these troops are intended to do. But this having been decided for all units at home, it becomes possible to approach the second of the problems mentioned namely, the determination of the best disposition of the stores required on mobilization.

3. *Stores required on mobilization.*

The stores which are required by any unit on mobilization¹ may be divided, broadly, into two categories—viz., those which are required to equip the soldier, and those which are required to equip the unit. Every reservist called up from civil life to join his corps has to be provided with a complete set of uniform, arms, and accoutrements, and every soldier already serving has, previous to a campaign, to be furnished with various articles which are required in war, but not in peace. Besides this equipment of the man, the unit itself requires its own regimental equipment of many articles which are necessary to enable it to move and fight, but which are in no way personal to the individual soldier. Such are camp equipment, supply wagons, transport wagons, ammunition, and many

¹ Regulations for Mobilization, 1892, para. 2, *et seq.*

other similar stores. At first sight, the simplest plan would appear to be to place at the station occupied by the unit all the stores, whether personal or regimental, which it would require for a campaign, and to maintain them there complete and ready for issue when required. But various considerations arising out of the peculiar military conditions of this country, already referred to, come in to render a departure from this simple and direct method of procedure desirable in some cases and unavoidable in others. In the first place, the storehouses for these articles of equipment, many of which are bulky, have no existence at the stations of the units, and the expense of building them would be very great. Secondly, the theatre of operations for any serious invasion of this country is marked out within well defined limits, and in consequence, the points at which the troops should be assembled, between the time of mobilization and that of actual hostilities—or “places of concentration” as they are termed—can be, and are, decided on. No advantage would arise from blocking our railways, the resources of which are certain to be severely strained on a general mobilization, by bringing large numbers of wagons and other cumbrous material, from outlying stations to these previously determined places of concentration. It is preferable to store the bulkier and less easily transportable articles of equipment at these places, and to leave only the stores immediately required by the reservist on joining, and the lighter articles of regimental equipment, at the station of the unit; and this is the method which has been adopted. With the exception of clothing, the personal equipment required by a reservist on joining is stored at the peace station of his unit, as are also the lighter articles of regulation equipment and those which are most immediately required, such as are necessary for daily life. The heavier articles of this equipment, and those which would not be wanted until the unit actually took the field—viz., those for fighting purposes, are stored in magazines contiguous to the point on which it would concentrate. The clothing remains at the

army clothing department at Pimlico, to be issued from thence all over the kingdom when mobilization is ordered.

Thus we depart in two material items from the principle of keeping all the equipment required for war at the station occupied by the unit in peace. The supply of clothing is centralized at Pimlico while, in order to save a great amount of unnecessary railway transport, the heavier portion of the regimental equipment is stored near the place to which the unit would move on concentration previous to taking the field. In other respects the usual method, that, namely, of keeping what will be wanted, ready at the peace station, is followed.

Having thus explained the main features of the grouping of the troops, and of the localization of stores, it only remains in order to give a sketch of our home defence mobilization system, to describe the arrangements connected with the joining of the reservists. This can be done very shortly. The detail connected with the issue of notices, provision of railway and passage warrants, settling of men's reserve pay, accounts, &c., is naturally complicated, and anyone desirous of mastering this, had better consult the mobilization regulations. But the principle is simple. It is that a reservist, when summoned to rejoin the colours on mobilization, should join the *depôt* of the regiment or corps to which he belongs, and after receiving there his clothing and necessaries, and having his papers adjusted and set in order, should proceed to the particular unit to which he is posted, where he is furnished with his arms and the rest of his equipment, and takes his place in the ranks. Certain special corps such as the engineers and the medical staff corps form exceptions to this rule, as their reservists proceed direct to the units to which they are posted, without joining first at the *depôt*. The reason for this in the engineers is the highly specialized nature of the work each man has to do. It would be a waste of training, for instance, to send a reservist from the balloon section to join a railway company. It is preferable, therefore, by means of lists, carefully main-

tained in peace, to keep each reservist of the Royal Engineers detailed to the particular unit of the corps, whether bridging troop, field park, railway company, or whatever it may be, in which his services can be most profitably employed on mobilization, and when this takes place, to order him to join that unit direct, without an intermediate stay at the dépôt. In the medical staff corps again a number of units and detachments of very various kinds, some for garrison work, and some for field work, would have to be created on mobilization. These when formed would be distributed over many parts of the kingdom, and as the medical staff corps is, in peace, scattered over all our military districts, it is of advantage to form the war detachments from the men of the corps, whether serving, or reservists who are already in the districts in which these detachments will first be mobilized. This cannot be done completely as the peace distribution of the men, and of the reservists, of the medical staff corps does not, it is needless to say, correspond with our war requirements. But it is done as far as may be, and, in consequence, the reservists join at the headquarters of the unit or detachment in which they are to serve, and not at the dépôt of the corps.

4. Provision of Horses.

The only other point on which it is necessary to enter before concluding this short sketch of home defence mobilization, is that of the provision of horses. The number of horses maintained at home for military services in peace is, of course, far from sufficient for war needs, and the method adopted for meeting the deficiency, namely that of inviting owners of horses, by means of a small retaining fee per horse, to enter into a contract to sell to the military authorities on mobilization a certain number of horses for a given price is fully described in Chapter X. When mobilization takes place, the remount department collects the horses at pre-arranged centres and issues them to horse parties sent from the units for them. The detail of the number and

nature of the horses for each unit is tabulated in peace, and the unit is made acquainted with the centre at which to obtain its horses and the strength of the party it should send for them.

As regards the machinery for the collection and issue of horses, the arrangements above described appear to leave little to be desired. It cannot however be safely reckoned that the registered horses would be sufficient for the requirements under all circumstances. We may still have to resort to hiring, or to impressment or purchase under the statutory powers given,¹ and it is well that this fact should be borne in mind.

5. Concluding Remarks.

Such are the main features of the arrangements that would be followed were this country suddenly called upon to put all its home forces in the field. They vary in no inconsiderable degree from those which have been determined upon by the great military Continental powers. In some cases the variations have been forced upon us by the peculiar nature of our whole military system, in others they have been deliberately adopted in view of the special conditions which would attend a campaign carried on in Great Britain against an invader. Many of them are still incomplete and for all it is uncertain, until their working has been tested by actual experiment, what latent defects may not exist. But in spite of the gaps present in some parts of our scheme and the want, as yet, of a practical peace trial of the whole, the adoption of a definite and distinct programme for home defence, based on the nature of the material we have to work with and of the emergency that we should have to meet, has given a precision and a certainty to our military aims unknown before, the result of which is best judged by the progress our army has made in very recent years and is still making. And this

¹ See National Defence Act, 1888, modifying Army Act, 1881, sect. 115.

progress is not confined to the regular troops, but extends to our auxiliary forces. The incorporation of the militia, yeomanry, and volunteers in the home defence scheme and the assigning to every corps a distinct duty, has not only filled these troops with a new spirit, but has also produced in the country at large a completely different attitude to what previously existed as regards their being provided with the equipment and material necessary to render them efficient fighting bodies. The welding together of the regular and auxiliary forces now proceeding is laying the foundations of a really formidable army, and every year which passes since the country first decided on seriously facing the possibility of a home defence campaign, sees that army shape and grow.

FOREIGN EXPEDITIONARY FORCE.

Compared with the organization required for the mobilization of our whole land forces, that for the provision of the relatively small column necessary for one of our smaller wars, is a minor matter. Were it not for two difficulties, all that would be wanted would be to take a portion of the field army for home defence, tell it off as a force to form the expeditionary column when required, and make the necessary arrangements with the Admiralty for providing its sea transport, the ports at which the different units shall embark, and decide on the order in which the embarkation shall be carried out. But, as just mentioned, two difficulties come in the way of this apparently simple arrangement, both arising from the same cause, namely, our ignorance of the particular duty on which this column is to be employed. The words, "a foreign expedition," cover a multitude of possibilities, and, until we know the enemy we have to fight and the country in which we have to operate, we can neither tell what the strength of our column should be, nor how it should be equipped. All we can do is to detail a field force of moderate strength, *i.e.*, of a strength sufficient to meet any of

the semi-civilized nations which we are in the habit of encountering in our Colonial wars, to provide it amply with the equipment most likely to be generally serviceable, and to arrange for its embarkation and transport across the sea. To do more than this would be to rest our preparations absolutely upon guesswork.

And this accordingly is what has been done. An expeditionary force of about 20,000 men has been detailed, the component units of which have been carefully selected so as to contain an extra quantity of the various services most likely to be wanted in a country whose resources are scanty and whose communications are little developed. General equipment on a liberal scale is provided. The mass of the troops to form this field force are at Aldershot, and its equipment is divided between Aldershot and Southampton. The same line of division between the lighter and heavier articles of regimental equipment that is adopted for home defence is followed for this force, the personal equipment and such of the regimental equipment as would be immediately required being stored, in the main, at Aldershot, while the bulkier portion of the latter is kept at Southampton.

As one of the leading principles of our present military organization is that units, before proceeding on active service should be brought up to war establishment by the reserve, it is probable that before this expeditionary force was sent abroad the reservists required would be called out. In this case, whilst the reservists were joining their units at Aldershot, the embarkation of the heavier stores would be proceeding at Southampton, so that the whole force with its equipment might be ready to sail with the least possible delay. If, however, the emergency were so pressing that it became necessary to despatch troops without waiting for the calling up of the reserves, the course described on page 116 would most likely be followed, and the reservists, if summoned, would follow and reinforce their units later. A crisis, however, which demanded such a very hurried

despatch of troops would evidently be of a most urgent and unusual nature, and it is difficult to lay down beforehand the special measures it might necessitate.

Given favourable conditions, that is, assuming that the equipment kept ready were suitable to the country in which the campaign was to take place, the despatch of an expeditionary force could be effected with great rapidity. But, generally speaking, the initiation of such an operation would rest with this country, and as the preparation of any special equipment would demand time, it is to be anticipated that under most circumstances a reasonable period for preparation would be available. Under any conditions, rapidity with regard to the embarkation of troops for foreign service, could never be of the absolutely vital importance that it would be in the case of a mobilization for home defence.

The above will, it is hoped, afford a general idea of the principles on which we are at present acting in our mobilization arrangements. More than this it is not proposed to give. The subject is one which, in its working out, is filled with innumerable details of a minute and complicated nature. Anyone desirous of studying these had best consult the various regulations in which they are dealt with. The object of this chapter is not to give a working manual of our mobilization procedure, but only to make the general reader acquainted with the main lines of its method and spirit.

CHAPTER XXX.

SITUATION AT HOME IN WAR. TRANSPORT OF TROOPS
OVER SEA.1. *Laws with reference to Preparation for War.*

THE powers of the Executive with regard to the mobilization of the forces are fixed by statute. In the preceding chapter the principles governing our arrangements for mobilization and for war have been set out. It is now proposed to give a brief *résumé* of the laws under which these arrangements can be put in force.

The military forces of the country may be divided into three great categories—the first line, the second line, and the third line. The first line is available for services in all quarters of the globe. The second line is available only for home defence, and for garrisoning certain foreign stations. The third line is available only for home defence, and can for the most part only be called out when the United Kingdom itself is in danger of attack.

The regular forces form the first line. To bring the regular forces to a war footing, the 1st class army reserve is in the first place available. Under the Reserve Forces Act, 1882 (s. 12), this can be called out by “proclamation”¹ in case of imminent national danger and of great emergency. The militia reserve is also available, and can be called out under the same section of this Act and under the same conditions; it then becomes part of the regular army, and is liable to serve at home and abroad. When the militia reserve is called out for service with the regular forces, the militia is

¹ See pp. 132 and 524.

deprived of a large portion of its strength, so that in certain cases which might arise, it might be inadvisable to call upon this secondary reserve to join the regulars. But by law the militia reserve, as well as the standing army and the army reserve, is available for carrying on a war outside the United Kingdom, if the war be on such a scale as to constitute a national danger. Except in case of imminent national danger and great emergency, the standing army alone is available for prosecuting a campaign outside the limits of the United Kingdom.

It will be convenient to give here the probable course of the procedure when reserves are called out.

When in the opinion of the War Office mobilization appears imminent, general officers commanding at home and abroad, and officers commanding reservists would be duly warned, in order that they should carry out any preliminary measures necessary. Before a mobilization can take place the Cabinet will of course have arrived at a decision that the military forces of the country should be placed on a war footing—that, in fact, a situation has arisen which may be termed one “of imminent national danger and of great emergency.” The Cabinet will also have decided whether the circumstances are such as to demand the calling out of the whole of the reserves, or only of a part. The War Office will be immediately notified of the decision of the Cabinet, and the Permanent Under Secretary will despatch a letter (a draft of which is kept ready for signature) with the necessary proclamations attached, to the Clerk of the Privy Council with the object of obtaining approval to such proclamations.

The “Reserve Forces Act” then empowers Her Majesty in Council by proclamation, the occasion being first communicated to Parliament if sitting, or declared in Council and notified by proclamation if Parliament is not sitting, to order the army reserve and militia reserve or either to be called out for permanent service.

When approval has been obtained to the proclamation,

which would be a matter involving, probably, a delay of only a few hours, orders will be issued to general officers commanding and to the officers commanding reservists to mobilize, and the former will immediately inform officers commanding units.

Officers commanding reservists will arrange with municipal and parochial authorities, that the proclamations shall be posted without delay in all public places, on the doors of town halls, churches, chapels, police barracks, on the gates of military barracks, and in the windows of post offices. A supply of posters is always in the hands of the officers commanding regimental districts, for this purpose.

Officers paying reservists will despatch at once to the last address of reservists Army Form No. 463 (notice to join), to which is attached a postal order for 3s. A railway and passage warrant will also be sent. It is under consideration at present whether it is desirable to include also a railway and passage warrant, in one form with the notice to join and postal order.

On the reservist joining the *depôt* he will first be medically examined, and, if passed fit, be settled up with by the officer paying reservists. He will receive his clothing and the greater part of his necessaries at the *depôt*. He will then be either drafted to the battalion to fill it up to war establishment and in such case will on arrival at his battalion receive his arms, accoutrements, and a few special necessaries, or he will remain at the *depôt*, perhaps to form with other surplus reservists the cadre of a new battalion, perhaps to replace casualties.

The militia forms the second line. Under the Militia Act, 1882, sects. 18, 19, this part of Her Majesty's forces may be embodied by proclamation under the same circumstances as the army and militia reserves can be called out, *i.e.*, in case of imminent national danger and of great emergency. But when embodied, the militia is not (excepting the militia reserve) liable to serve abroad, although they may volunteer for service in the Channel Islands, Isle of Man, Malta, and

Gibraltar.¹ The militia is thus available for the defence of the United Kingdom, and may be available for the defence of the above-named stations outside its limits, but cannot be employed on a foreign campaign. The militia has, as has been shown in the preceding chapter, its place in the field army for home defence, as well as in performing garrison duties. In case of foreign war, the object of the militia is to replace the regular forces in garrisons at home and certain garrisons abroad, enabling these to be sent to the seat of war.

The yeomanry and volunteers form the third line. These troops are available only for the defence of Great Britain. The yeomanry² can be called out whenever the militia is embodied, *i.e.*, in case of imminent national danger and great emergency ; but they cannot be employed outside of Great Britain. The law as regards the volunteers³ is, that all or part of them can be called out by proclamation in case of actual or apprehended invasion of any part of the United Kingdom ; but they are not available for service out of Great Britain. Thus the yeomanry can be called out for home garrison duty in case of a foreign war, but the volunteers cannot. Neither can be employed in defence of Ireland, even should that part of the United Kingdom be invaded, although they could be employed on garrison duty in Great Britain in such a case.

For the defence of Great Britain therefore all categories of Her Majesty's forces are available. For the defence of Ireland the regulars, including the army reserve and militia, are available ; the volunteers and yeomanry are only in so far available that they can be called out, and can take the places of regulars and militia sent from Great Britain. To meet the case of a foreign war of importance, only the regulars and the army and militia reserves are available ; but the militia can be embodied to garrison the United Kingdom and (voluntarily) the Channel Islands, Isle of Man, Malta, and

¹ Militia Act, 1882, sect. 12.

² National Defence Act, 1888, sect. 2.

³ Manual of Military Law, p. 284.

Gibraltar ; the yeomanry can also be called out, and the militia and yeomanry may thus liberate the regular forces from garrison duty. For a foreign war of minor importance not involving imminent national danger and great emergency, only the standing army can be employed.¹

Having given a sketch of the law as regards the bringing the military forces of the country to their war footing, it will not be out of place to briefly explain the state of the law with regard to the acquisition of land, &c., for military purposes, and also to the requisitioning of civilian transport. The powers of the executive with regard to railways are given later under the head of "Railway Organization."

The Secretary of State for War is empowered to purchase and hire lands, buildings, &c., and especial statutes exist for simplifying the transfer of the property in such cases. In the event of an owner declining to part with land, &c., required by the War Department, he can, under the provisions of the Defence Act of 1842, after due notice, involving some delay be compelled to do so by a warrant under the hands of the Lords Commissioners of the Treasury, the expediency of the transfer having been certified by the Lord Lieutenant, or by two Deputy Lieutenants. Should an invasion of the United Kingdom have taken place, the Secretary of State is empowered after due notice to take lands, buildings, &c., without the consent of the owner, and without any warrant. The effect of these enactments is, that land can always be obtained but only after some delay.

No country maintains in peace time the full complement, or anything approaching to the full complement, of transport which its armies will require on mobilization. On the Continent, the liability of owners of transport to having it requisitioned by the military authorities in time of war, is almost invariably authorized by law. In this country the requisitioning of transport for military purposes is not sanctioned by statute except in case of emergency. In the

¹ Together with volunteers from the reserve as shown on p. 116.

event of mobilization, such vehicles or animals as might be required to complete the army service corps companies, or to form a supplementary transport service, would be obtained by purchase, by contract, or else on requisition—the latter method being the best adapted for meeting a sudden emergency. The Executive is empowered¹ in case of emergency to authorise an officer commanding a district or place in the United Kingdom to requisition carriages and animals, and also boats, barges, &c., used for inland navigation, for the service of the troops. Transport so requisitioned is, of course, paid for. But since the impressment of civilians as drivers and caretakers of the animals is not permitted by the law of the land, the organization of the requisitioned transport would present considerable difficulties, unless the owners and their *employés* came forward voluntarily. Of course, when the transport is required merely to complete army service corps companies for which a military *personnel* exists, these difficulties would not arise.

Having briefly explained the powers of the Executive with regard to mobilizing Her Majesty's forces, and with regard to the acquisition of land required for military purposes, and to the supplying of the army with the transport which might be necessary for it, we may pass on to the consideration of certain questions which arise when the army is placed on a war footing. In its concentration for any purpose railways will obviously play an important part. The accommodation of the large forces which will assemble on mobilization is a problem that must be grappled with. In the event of a foreign war troops will have to be conveyed across the sea. And in all cases where the whole, or part, of the military forces of the country are placed on a war footing, the depôts have duties to perform, the exact nature of which, and the influence which they may exert on the course of the campaign are not at once apparent. With all these subjects it is now proposed to deal. But before proceeding to treat of them, a

¹ Army Act, 1881, part iii., sect. 115 as amended by National Defence Act, 1888.

word of explanation with reference to the question of local defence, as distinguished from that of armies intended to operate in the field, appears to be desirable.

2. Local Defence.

Under the scheme of the distribution of the forces for home defence, a considerable proportion of the troops available are, as stated in the last chapter, told off to act as garrisons for certain places and districts. The nature of the duty which these garrisons are intended to perform, permits of their organization and their distribution in case of war being calculated with some exactitude. Their share in the work of safeguarding the United Kingdom is clearly defined, and the problems that may present themselves to each during the course of hostilities can be foreseen. It has therefore been possible to work out schemes of defence for them in some detail, and each unit has its part told off to it and has its specific duty to perform. The question of supply and accommodation for the troops has also been carefully considered. Schemes of defence of this character are of course confidential, and it is sufficient for the purpose of this work to say that they exist.

Some military districts, some of our fortresses even, cover an extensive area—an area so extensive indeed that, for purposes of command and responsibility, it is absolutely necessary that they should be broken up into several subordinate commands. Under the arrangements decided upon in each instance a thorough system of decentralization has been introduced. Each subordinate commander is nominated and has a staff told off to assist him. He is made acquainted with the exact extent of his command and with the composition of the force which will, when the emergency arises, be under his orders.

In devising a military system adapted to the very varied requirements of the British Empire, the impossibility of laying down with any certainty how and where the army may be called upon to act has always been the main diffi-

culty. This difficulty does not present itself at all to the same extent to the central military administrations of foreign countries. But in framing and elaborating local schemes of defence for the United Kingdom, only a certain number of possible contingencies have in each case suggested themselves. There have been definite problems to solve. There have been exact data to go upon. And it may be said with some confidence that the conclusions arrived at and the arrangements decided on will fulfil the end they have in view, should they unhappily ever be put to the test.

3. *Railway Organization.*

The extent to which railways are employed for military purposes is a distinctive feature of modern warfare. While the territorialization of the troops and the decentralization of clothing, equipment, and stores, permit of armies being raised in the present day from a peace to a war footing within the space of a few days, the development of railway communication in all civilized countries enables the mobilized forces to be concentrated in or on the borders of the theatre of war with a rapidity which, prior to the introduction of steam, was not thought of.

In the event of war or threatened invasion, the executive has ample powers to employ the vast net-work of railways spread over the British Isles. British railway traffic is, however, conducted on so vast a scale, and its management is a subject of such complexity, that it would obviously be undesirable to withdraw its control, under any circumstances, from the hands of the trained and experienced officials of the various companies. The terms of the legal enactments with reference to the power of the military authorities over railways in case of emergency are as follows. "When Her Majesty by Order in Council declares that an emergency has arisen,"¹ the State has the right under the

¹ Regulation of the Forces Act, 1871, part iv., sect. 16, and see Manual of Military Law, p. 818.

"Regulation of the Forces Act, 1871," "to take possession in the name or on behalf of Her Majesty of any railroad in the United Kingdom, and of the plant belonging thereto, or of any part thereof, and may take possession of any plant without taking possession of the railroad itself, and to use the same for Her Majesty's service at such times and in such manner as the Secretary of State may direct . . ."

Also under the provisions of the "National Defence Act, 1888," "Whenever an Order for the embodiment of the militia is in force, it shall be lawful for Her Majesty the Queen, by order signified under the hand of a Secretary of State, to declare that it is expedient for the public service that traffic for naval and military purposes shall have on the railways in the United Kingdom, or such of them as is mentioned in the order, precedence over other traffic." In the above Acts "railroads" and "railways" include tramways.

In the event of the above powers being put in force it would devolve on the military authorities to control the railways, the work being carried on by the ordinary staff of the companies. The War Office would in a case of this kind have the benefit of the great experience and assistance of an organization which has existed since 1860, called the "Engineer and Railway Volunteer Staff Corps" officered by civil engineers many of whom are connected with the leading railway companies of the United Kingdom, and who have offered their services to advise and assist the military authorities in emergencies, in matters connected with railway management and engineering work generally.² There is every reason to believe that, in case of the military forces in the United Kingdom being mobilized for the purposes of home defence, and being concentrated in any part or parts of the country for the purpose of guarding against or confronting an invasion, the railway arrangements would work satisfactorily. The remarkable success which has attended the concentration of large bodies of volunteers

¹ National Defence Act, 1888, sect. 4, sub.-sect. 1.

² See chap. xxiii. (Volunteers.)

gathered from all quarters of the Kingdom for military functions and reviews on more than one occasion, has shown the extraordinary capabilities of the British railway system for military transport on a great scale. Rolling stock is abundant. The more important lines in England have a double line of rails, some have four or more lines. Gradients, moreover, as a rule are easy—an important point since troop trains generally are very heavy.

The employment of railways for military purposes is a highly technical subject. The movement of great masses of troops to a given point under pressure of time is an operation of much delicacy. An infantry division on the scale laid down in Chapter XXVIII. and the Appendix, is calculated to require 39 trains, the greater part of which would have to consist of over 30 carriages. A troop train takes from half an hour to an hour to unload. Therefore the small force represented by a single division would take about 24 hours to detrain if only one platform was to be available. It is not only the difficulty of drawing up time tables but also that of detraining large bodies of troops rapidly at a given locality, which has to be provided for. All arrangements must be carefully thought out. Upon the adequacy of the preparations made in peace-time depends the rapid concentration of the military forces of the country in case of war.

4. Accommodation of the Troops.

The billeting of troops on the march on the inhabitants of the United Kingdom, other than the owners of inns, hotels, livery stables, and public houses, is illegal. Troops when not on the march cannot be billeted. The accommodation of an army concentrated at some point for the defence of the country is, therefore, a difficulty. The transport of tents is inconvenient, and practically such troops belonging to a field army in the United Kingdom as could not be accommodated in licensed houses or buildings especially hired, would have to bivouac. Public buildings, churches, schools, court-houses,

and so forth, could generally be hired. There is, moreover, no reason to anticipate that the public would not voluntarily place accommodation at the disposal of the military authorities in case of grave danger threatening the State. Still, it is from the military point of view unfortunate that the commander of the forces in defence of the country is debarred from billeting his troops on the people.

Some system of providing huts for the troops, made of straw, canvas, or tarpaulin, could perhaps be resorted to, but we have not, at present, experience of any approved design. For prolonged occupation, objections would be likely to offer themselves to such methods on sanitary grounds.

The law with regard to the billeting of troops in licensed houses is contained in the Army Act, 1881.

5. *Work of the Depôts.*¹

We come now to the position of the depôts in time of war. Depôts have, it must be remembered, their duties to perform not only towards the troops engaged in the defence of the United Kingdom if this is threatened, but have also an important part to play with reference to the troops forming an expeditionary force operating in a foreign theatre of war, and towards the forces stationed abroad. The duty of a depôt is not to fight, but to feed the troops engaged in the field with officers, non-commissioned officers, men, horses, and so forth, so as to fill up the gaps caused in the ranks as the campaign progresses. An army in the field suffers from a constant wastage due to disease, to casualties in action, &c., and this must needs be made good or the force will suffer in efficiency. Before giving a sketch of the work that would be performed at depôts in time of war, a few words on this question of wastage in war will not be out of place, for it is one which is often lost sight of.

(a) *Wastage.*—An army cannot safely enter upon a campaign unless it has reserves to fall back upon. It is not

¹ See chaps. vii. and viii.

so much the losses on the actual battlefield which sap the numerical strength of a force, as the losses arising from disease. The extent to which wastage affects the fighting capabilities of troops depends, of course, on a great variety of circumstances. The losing side necessarily suffers most, not only owing to casualties in action, but also owing to prisoners being taken, and to the fact that the sick cannot be so well cared for. The climate and the nature of the theatre of war exert great influence over this question. Moreover, the longer hostilities last the greater is the drain in men; for disease seldom makes itself severely felt in a short campaign, unless the climate be very unfavourable.

It is difficult to believe that a campaign in the United Kingdom could continue long. Moreover, the climate of the British Isles is healthy, resources are abundant, and house accommodation is plentiful. Therefore the wastage that would occur in armies engaged in the defence of the mother country would probably arise mainly from casualties in action. But, in the case of an expeditionary force despatched from the United Kingdom to undertake operations abroad, it will generally happen that wastage is due chiefly to disease. Experience has, indeed, shown this to be the case. Wastage in former campaigns can be shown by statistics, and some of these may be quoted here.

In the Crimean war the British troops suffered terribly from disease. The 10 cavalry regiments which embarked for the East in 1854, mustered, to start with, 3,148 of all ranks; they required drafts amounting to a total of 3,167 to keep them in the field. The 41 infantry battalions which originally embarked mustered 36,923; they were reinforced by 27,884, and their strength at the conclusion of hostilities was 653 less than it was at the outset; their wastage thus amounted to 28,537, or 77 per cent.

The conditions of the American war of Secession were peculiar, but the figures are none the less instructive. Statistical records show that the average strength of the Federal forces during the four years of hostilities was about 600,000; 313,000 died from all causes (186,000 succumbing to disease) and 285,000 were discharged as unfit for further service. Thus the total wastage from death, wounds, and disease was 598,000. But in addition to this 184,000 were taken prisoners and 199,000 are shown as having deserted. And it must be remembered that the 600,000 given as the average strength includes depôts, garrisons, &c., and that the average strength of the actual field armies did not probably exceed 200,000.

In the Franco-German war the French suffered such unprecedented disaster that their portentous losses, the extent of which can be only roughly estimated, would give an exaggerated idea of wastage in war. But the German armies, in spite of the uniform success which attended their operations, suffered severely, as is shown by the following figures. The average strength of their field armies was about 650,000 men; there were 41,000 deaths, of which 12,000 were due to disease; 240,000 were sent back incapacitated during the campaign; thus the total wastage was 281,000. Practically one man in every three had to be replaced, and this was in a campaign lasting only six and a half months, in a good climate and in a country where the troops could often be got under cover—in a campaign moreover which was an almost unbroken series of successes. The two Bavarian army corps which were engaged throughout in the open field required drafts of 48,000 men to keep them to their strength of 70,000, although their total loss in killed and wounded was less than 14,500.

While the German armies in 1870-71 afforded an example of losses in action as being a very important source of wastage, the Russian armies in 1877-78 may be cited as giving an instance of wastage mainly due to other causes. From the published tables it appears that in Europe 17,000 were killed or were shown as "missing," 50,000 died from disease and 85,000 were invalided, making a total of 102,000; but no figures exist to show the number of men non-effective but not invalided. The tables show that altogether 600,000 men took part in the campaign in Europe; but nothing approaching to this figure can be accounted for at any one period, and it is instructive to note that in May 1878, after the peace of San Stefano, no less than 45 per cent of the Russian forces before Constantinople were in hospital. In Asia 250,000 men are shown in the tables to have taken part in the operations, but there were never more than 150,000 in the field, and at the close of hostilities the total force mustered only 142,000. The medical statistics show that 37,000 deaths occurred, of which only 1,950 were due to casualties in action; 11,000 were wounded who recovered; no details exist as to the numbers invalided.

In irregular warfare and minor campaigns generally, wastage arising from casualties in action is not large. 11,000 Russian troops took part in the campaign of 1879 against the Turkomans; the loss from deaths and invaliding was about 2,000. In the nine months during which the British operations in South Africa lasted in the same year, 1,121 deaths occurred, and 1,098 were invalided—2,214 from a force averaging 12,650. In the Egyptian campaign of 1882, 234 died and 2,321 were invalided in twelve weeks; the average strength of the force during this period was 13,013, but for part of the time the strength exceeded 25,000. The Nile expeditionary force numbered 9,500 of all ranks; 537 deaths occurred and 1,376 were invalided.

The statistics given above serve to show what is meant by wastage, and how great a drain on a country's resources in men a prolonged campaign may prove. A force has not only to be put in the field but to be kept in the field, and it is the depôts which make good the wastage that occurs.

(b) *Depôts during Mobilization.*—The process of mobilization at depôts of infantry has already been explained in Chapter VIII. The actual mobilization, of course, throws heavy work upon the depôts. The issue of clothing and necessities to large numbers of men arriving from all quarters at all hours of the day, the checking of the stores sent from Pimlico, the arrangement for housing the reservists temporarily, the preparations necessary for receiving the men sent back from service units, all this gives the permanent staff of the dépôt a very busy time. But the work does not by any means cease with the completion of mobilization, after which depôts still have most important duties to perform.

(c) *Depôts after Mobilization.*—When the service units have been brought to a war footing, the situation at a dépôt would probably be this. There would be a varying number of reserve men not required with their regiments or corps, there would be some recruits only very recently enlisted, and there would be some men sent back from service units as unfit for the field. Were it a case of mobilization for home defence there would probably be a considerable number of reservists and very few recruits and men sent back as unfit; were it a case of mobilization for a foreign war the opposite would probably be the case.

In the meantime the dépôt would be organized with a view to its rapid expansion. An infantry dépôt would be formed into a dépôt battalion of eight companies.¹ The officers required would be obtained largely from the reserve of officers. Non-commissioned officers would be obtained from the army reserve; for on mobilization there will always be a surplus of them, inasmuch as the cadres of the standing army have on a peace footing practically the full war establishment of non-commissioned officers, and there will be no places at first in service units

¹ The accommodation at a normal dépôt is generally limited to the requirements of some 250 men. Hence there is necessity for an organization which will allow of the bulk of the men in excess being sent to some station where there is room for them.

for those coming from the army reserve. It might become necessary to form a second *depôt* battalion, should that originally formed become swelled to inconvenient limits.

In time of war recruiting would go on more actively than ever, and, as experience has shown, men are at such times more ready to enlist. It depends, of course, very much upon how far public enthusiasm had been excited by the events leading up to the struggle and by the course taken by the campaign, whether the young men of the country would or would not flock to the colours. It is, however, a gratifying fact that in times of national emergency recruiting has generally been most satisfactory. At such times especial inducements would, if necessary, be held out to encourage enlistment. In any case the work of collecting and drilling recruits at the *depôts* would be pushed on with the utmost vigour. In time of war the training of the recruits for the purpose of taking their place in the service units can be carried out under greater pressure than is expedient in a volunteer army in time of peace.

Then as the campaign progresses and as the army in the field begins to suffer from wastage, demands come upon the *depôt* for drafts to again bring the service units up to their war strength. The best men are selected at the *depôt* and are sent to the theatre of war under such arrangements as may be made at the War Office. Moreover, the *depôt* has then to be prepared to receive men sent back from the forces operating in the field as unfit. Actual invalids would be sent to the large military hospitals, Netley, Herbert Hospital, &c. ; but large numbers of men are generally invalided merely temporarily, and these afterwards go to the *depôts* and are kept there till they are again fit for service.

TRANSPORT OF TROOPS OVER SEA.

Owing to the peculiar geographical conditions of the Empire, the question of sea transport has a far greater importance for the British army than it has for Continental armies. In peace time the necessity of relieving corps quartered in

foreign stations and the need for replacing the casualties which occur among British troops abroad, bring it about that considerable portions of the regular forces are yearly transported across the seas on voyages of varying lengths. In time of war any expeditionary force despatched from the United Kingdom must be conveyed to the theatre of operations on board ship. The transport of troops and stores by sea is therefore a subject which has received much attention in this country. As a result of the various campaigns in which British troops have of late years been engaged, valuable experience has been gained with regard to the preparation of vessels for the transport of horses and military carriages, and to the conduct of military embarkations and disembarkations, and the transport of troops by sea in time of peace is carried out with perfect regularity and with a due regard to their comfort and well-being. Adequate and well considered arrangements now exist for making full use in case of emergency of the vast mercantile marine which is a national property.

For carrying out the annual reliefs there are four troopships belonging to the Indian government, the "Crocodile," "Euphrates," "Malabar," and "Serapis," and three Imperial troopships belonging to the home government, the "Himalaya," "Tamar," and "Assistance." They are all specially adapted and arranged for the conveyance of troops, are under charge of the Admiralty, and are manned by the Royal Navy. In case of war they are available for the transport of portions of an expeditionary force. But even in time of peace it is often found necessary to supplement them by private vessels, and in the event of war they would generally be quite inadequate to convey the whole of the required troops to their destination. When the government troopships are found insufficient it becomes necessary to hire vessels, wholly or partially. This duty, as also that of controlling the service of the troopships, falls upon a "transport department," which forms part of the Admiralty and is under charge of a naval officer of high rank entitled the

Director of Transports. This central department is represented at each principal port at home, and in the colonies, by a naval officer who is in charge of the transport service at that point. Registers are kept at the transport department of all British vessels belonging to private owners which from their nature are adapted for the conveyance of troops, so that in the event of a large number being suddenly required the selection of those most suitable for the purpose can be rapidly made.

It is the duty of the Quartermaster-General's division of the War Office to inform the transport department of the Admiralty as to the number of troops, horses, &c., and the amount and nature of the stores which are to be shipped. The transport department thereupon selects suitable vessels, and the ports and dates of embarkation are then fixed by arrangement between the two departments, the military authorities allotting the various corps to the vessels. The necessary orders for moving the troops, &c., to the port of embarkation are issued by the Quartermaster-General.

While the government vessels intended for the transport of troops are known as troopships, hired vessels are classified as transports, troop freight ships, or store freight ships, according to the terms of the contract. Transports are vessels wholly engaged by government for a specified time and a specified service. A vessel partially engaged by government for the conveyance of troops, as for instance when passages are taken for a detachment on an ordinary mail steamer, is known as a troop freight ship. Store freight ships are vessels wholly or partially loaded with government freight.

The tendency is to use as large a class of steamer as can conveniently be employed in the waters to be navigated. Sailing vessels can under favourable conditions be towed by steamers, and several were employed in this fashion for the conveyance of troops from India to the Red Sea at the time of the Abyssinian expedition of 1868, and to Malta in 1878. The larger the vessel the greater proportionately is its

carrying capacity, and the greater is the comfort of the troops and horses embarked on board of it: by employing large vessels the units are also less broken up. For conveying a given number of troops to a given destination the exact tonnage required cannot be calculated beforehand, since this depends upon the size and nature of the vessels which may happen to be available. But rough estimates can generally be given, and a few words on this subject will not be out of place.

Ships are registered as of so many tons gross, the number corresponding to the total cubic space below deck and the cubic content of closed spaces above deck. But to arrive at their freight-carrying capacity, or net tonnage as it is sometimes called, it is necessary to deduct all spaces not available for freight, *i.e.*, crew-accommodation, engine-room, &c., which in steamers generally amounts to about 40 per cent. of the total space. A steamer of 3000 tons gross would ordinarily only have a freight-carrying capacity of about 1800 tons. As however, the size of vessels is generally given in gross tonnage, it is more convenient when dealing with the question in general terms to speak of this alone.

In calculating the approximate amount of gross tonnage required for conveying troops across the seas, the length of the voyage to be undertaken has to be taken into account. In all cases when of recent years an expeditionary force has been despatched from the United Kingdom, the theatre of operations has been so far distant that the voyage thither lasted ten days or more. When troops must remain on board ship for so long a time as this it is absolutely necessary that they should not be overcrowded.

A good example of the amount of tonnage required under such circumstances is afforded by the Egyptian expedition of 1882. A force of 19,148 of all ranks with 5,908 horses was conveyed in 47 steamers with a total tonnage (gross) of about 140,000. Of these vessels only three were of less than 2,000 tons, the average tonnage being 3,200 and several being over 4,000 tons. The voyage in most cases lasted 11 or 12 days. In 1879, 18 steamers with a tonnage of 55,000 were required to transport a force amounting to 8,136 of all ranks with 1,851 horses from the United Kingdom to the Cape.

It has been calculated that a British army corps composed as shown in Chapter XXVIII. and the Appendix, would require for a voyage of 14 days approximately 250,000 tons; and a sudden demand for shipping to this amount would throw a strain upon the mercantile marine of a country endowed with even such extraordinary resources as the United Kingdom.

But for short voyages far less tonnage than this is required, inasmuch as the troops and horses can then be more closely packed. And in cases of emergency, or when circumstances demand that the largest possible force shall be despatched by such vessels as happen to be available, $1\frac{1}{2}$ tons gross per man and 5 tons gross per horse will certainly be found sufficient for a voyage of a few hours. In a chapter such as this which deals with the British army in time of war, and in which the question of home defence comes under consideration, it is necessary to lay stress upon this. For were an invasion of this country ever to be attempted the expeditionary force told off for the enterprise would be crowded into such transports as had been collected for the purpose, until these were filled to their utmost capacity, and calculations based on the tonnage which has actually been employed in conveying British troops to distant lands give no idea whatever of the amount required under circumstances so wholly different. Cases have occurred where less than one ton gross per man has been allowed for troops of foreign countries, on voyages of a day and upwards, and when there was no emergency.

In all arrangements for conveyance of troops on board ships, horses are a special source of trouble. The vessels have to be fitted for the purpose. Embarkation and disembarkation are often difficult; and horses suffer in health and lose condition on voyages lasting only a few days to such an extent that they are not at once fit for service on being landed. In case of bad weather many casualties generally occur. On long voyages such as that from England to South Africa horses become debilitated, and if the trans-

port also encounters stormy weather, a large number will as a rule succumb before the destination is arrived at. Horses cannot moreover be packed to the same extent as men can on emergency, and on this account, and also owing to the difficulties that will often attend their disembarkation, the mounted branches are generally reduced to the lowest possible limits when arrangements are being made for a descent on the coasts of a hostile country. The same holds good with regard to carriages, which are very bulky unless they can be taken to pieces and stowed in the hold.

The arrangements for fitting hired vessels for the conveyance of troops are in the hands of the Naval transport department. All fittings required for the particular duty on which the ship may be employed, are put in at the expense of the government. These fittings are government property, but if left standing at the expiration of the time for which the vessel has been hired they become the property of the owner. The work is as a rule done by contract. Vessels intended for the conveyance of horses will generally take several days to prepare; for the preparation of those intended for the transport of dismounted branches of the service less fitment is necessary, and the work is of a simpler character. The requisite space for swinging hammocks, the sizes of stalls and their arrangement, the minimum space between decks, the size of hatchways, &c., are all laid down in regulations for the transport service,¹ and details need not here be given. Suffice it to say that the rules are framed with a view to securing that there shall be proper ventilation, that horses and men shall not be overcrowded, that sanitation shall be attended to, that proper precautions shall be taken for the storage of ammunition and combustibles, and generally that the safety, health, and comfort of the troops shall be ensured.² Although the selection of the vessels and the supervision of their fitment is the province of the naval

¹ See Regulations for Her Majesty's Transport Service, 1886, also Regulations for Her Majesty's Troopships, 1883 (official publications).

² Horse brushes and such gear are provided on board.

transport department in the first instance, they must be approved by a mixed board of naval and military officers before they can be used, the inspection generally taking place at the port to which the vessel first proceeds for the embarkation of troops.

When troops are embarked, or when military stores are loaded on board ships the responsibility of the navy begins at the water line, *i.e.*, the military authorities are responsible for bringing the troops or stores to the water's edge; but the representatives of the naval transport department are responsible for conveying them to the vessel, if boats, lighters, or tugs have to be employed, and for stowing them on board ship. All arrangements for bringing the troops and stores to and from the water's edge are carried out under the responsibility of the general or other officer commanding the station, and under the immediate superintendence of an embarking officer detailed by him. At the principal ports one staff officer is generally detailed permanently for this duty of superintending embarkations and disembarkations. In the case of troopships, officered as they are by the Royal Navy, the allotment of the troops to their messes and the telling off of cabin accommodation to officers, &c., is carried out by the naval officers. In the case of hired vessels these arrangements are under the superintendence of the naval transport officer, but are generally carried out by the officer commanding the troops on board and his subordinates.

It is usually desirable to stow the heavy baggage before the troops embark. In the case of mounted corps the men and horses will generally arrive simultaneously. The slinging of horses on board ship is carried out by the navy in the case of troopships, the military assisting and working under the orders of the naval officers. In the case of hired ships slinging will be left to the master, the troops assisting. The wharfage of the great ports of the United Kingdom is so extensive, and the appliances of all kinds are so complete, that the embarkation of troops is a very simple matter. The vessels can lie alongside, and troops and also often

horses can enter by means of gangways. But where, as at Bombay and Malta, large vessels may have to lie some distance from the wharves, and small craft have to be employed for conveyance to them, embarkation takes much longer and is a far more troublesome operation. At home the ports and the railways leading to them are so convenient, the number of vessels available is so large, and the arrangements for fitting these are so complete, that infantry or dismounted troops forming a small expeditionary force would generally be able to sail within 24 hours of the time they were completely mobilized. The preparation of transports for large numbers of horses will always involve delay; but with the fittings which are stored in readiness, 10,000 horses could be despatched in three weeks.

Disembarkation, except when in presence of the enemy, is practically the converse of embarkation. But in time of war disembarkation is often a tedious and difficult operation. The troops have to be landed at points dictated rather by the strategical conditions of the theatre of war than by their fitness for purposes of disembarkation. It is rarely the case that the disembarkation takes place at a first-class port. Circumstances seldom permit of the vessels being brought alongside wharves. The troops have often to land at small ports where few facilities for putting them ashore exist. Sometimes a landing has to be effected on a stretch of coast where there is no port at all. And whenever the vessels cannot be brought alongside jetties for the troops to disembark, an element of difficulty is introduced in that the men, horses, stores, &c., have to be conveyed ashore in lighters or other small craft. The duty of providing the necessary boats, &c., falls upon the naval transport department, but the ordinary boats carried by troopships and first-class mercantile steamers are generally spacious and numerous enough for landing the men carried on board; it is only for horses, guns and bulky stores that special boats are needed. The naval transport department possesses a large number of horse boats, designed for landing

horses and guns in shallow water, and if there was any probability of their being required, some would be carried in each vessel conveying the branches of the service wanting them.

The landing of the allied expedition in the Crimea took place in the open bay of Eupatoria, the vessels being moored one-third of a mile and upwards from the shore. 326 boats and 24 horse flats were used, and 14,200 men and 2 batteries of artillery were landed within 6 hours. The beach was convenient for unloading the boats as they reached the shore. In this case the rapid disembarkation of a considerable fighting force was a necessity of the plan of campaign. In Zula Bay where the Abyssinian expedition disembarked, and at Ismailia where the principal landing took place in 1882, everything had to be brought ashore in small craft, but some small jetties existed or were constructed which facilitated the unloading of the boats to a certain extent. Suakin and Trinkitat both possessed land-locked harbours; but all large vessels were obliged to moor a short distance from the shore. At Cape Coast Castle, on the other hand, where the troops for the Ashanti expedition landed, and at Port Durnford where some troops and stores were disembarked during the Zulu war, there are only open roadsteads, and at such places there is always some difficulty in carrying out the operation, which is very liable to be interrupted by unfavourable weather. At Durban, which formed the base in 1879 and again in 1881, large vessels anchor in an open roadstead, and their cargoes are conveyed over a bar through the surf into an estuary by small steamers and lighters; the port within the estuary has quays of some extent with various facilities for unloading.

These examples serve to show that elaborate preparations have generally to be made for the disembarkation of an expeditionary force, and that the landing of the troops at their destination is as a rule a much more difficult operation than their embarkation at home ports.

It is scarcely necessary, in conclusion, to point out that the smooth working of the transport of our troops over sea is a result of cordial co-operation between the naval and military services. The conveyance of considerable bodies of troops from the United Kingdom and India to Egypt, South Africa and elsewhere, has been a prominent feature of our recent military history. The commanding maritime position of the Empire greatly favours such operations. The remarkable success which has attended them is, however, mainly attributable to the excellent arrangements made by the naval transport department.

CHAPTER XXXI.

AN ARMY IN THE FIELD.

1. *Introductory.*

THE course of events necessitates from time to time the despatch of an expeditionary force from the United Kingdom or from some part of the British Empire to a foreign theatre of war. Such a contingency is provided for in our military organization, as has been already shown in Chapter XXIX. And while it is demonstrated by history that arrangements for meeting this contingency must exist, experience has also proved that the campaigns on foreign soil on which British troops become engaged are singularly diversified in their conditions. War in semi-civilized or in savage countries differs in many respects widely from war in the territories of a civilized power. Still certain broad principles will govern the action of an expeditionary force under all circumstances. It is to some questions of organization involved by these principles that it is now proposed to refer.

The mobilization of the army and its preparation for war have been dealt with in earlier chapters. In this chapter we assume the expeditionary force as existing, and—sea transport having been treated of in the preceding one—we further assume it to be placed in, or on the borders of, the theatre of war. Inasmuch as one of the first questions with which the commander of an expeditionary force has to concern himself will be, as a rule, the organization of the base for his army, will be taken first.

2. *The Base.*

An army in the field must have a base of operations. This may or may not be the starting point from which it

enters on field operations. In the Crimean war the allies landed at Eupatoria on the west of the peninsula, but Balaclava on the south of it became the British base during the siege of Sebastopol. The base may be changed during the course of a campaign, as that of the British forces was changed from the Tagus to Santander, when the Duke of Wellington drove the French out of Spain. It may be a maritime base or a land base. British military history affords many examples of the former. Any military operations which involve the movement of large bodies of troops and of large quantities of military stores across the seas must involve also their disembarkation in or near the theatre of war; and owing to the labour involved in this, to the fact that stores can almost invariably be landed more quickly than they can be moved to the front, and to the fact that a military force, after a voyage, necessarily goes through a certain process of organization at the point where it lands, the place of disembarkation generally becomes the base. Thus Cape Coast Castle was the base during the Ashanti war, Durban was the base during the Zulu and Transvaal campaigns, and Ismailia was the base in 1882. During the Nile expedition of 1884-85, on the other hand, Cairo was made the base, although a large part of the force employed, as also of the stores for the campaign, arrived in the first instance at Alexandria. Cairo forms an example of a land base, as do Peshawur and Kohat, which during the Afghan war, 1878-80, formed the bases of operations for the troops, respectively on the line to Jellalabad and Kabul, and in the Kurum valley.

A base may or may not be in hostile territory. Balaclava in the Crimean war and Ismailia in 1882 afford examples of bases of operations which had to be seized in the first instance. It is, of course, an advantage that the point selected to serve as base of operations should be on friendly ground; for this permits of preparations being made while the force intended for the campaign is being mobilized and concentrated. Especially is this of advantage when the

base is on the sea coast, since in most cases it is necessary to construct a few jetties, &c., in addition to those that may already exist, a work for which time is required. Arrangements for the disembarkation of the Abyssinian expeditionary force in Zula bay were in a forward state long before the bulk of the troops and stores arrived.

As an army engaged on operations in the field moves forward from its base, a line of communications with the base becomes necessary, and generally, as a matter of organization, the base is considered to form part of the line. An officer is appointed to command the line of communications, and the base is included in his command. This is not, however, invariably the case, for in the Nile expedition the command of the base was separated from that of the line of communications. In any case, however, a commandant of the base is appointed. He has to select sites for depôts, stores, and magazines, to open up communications, to arrange for hospitals, for camping grounds, and for accommodation of troops, and to attend to the sanitary condition of the place. When the base is maritime much work will often be necessary to improve the landing places. If there be a railway leading from the base which can be utilized, new sidings, platforms, &c., may be needed ; sometimes, as at Ismailia in 1882, considerable stretches of new line may have to be laid down. Civilian labour and also local civilian transport may have to be engaged. All this work falls to the commandant of the base.

A depôt will generally be formed at the base, where sick and wounded, coming from the front, are taken charge of. Here drafts intended to make good wastage at the front are received and retained till they can be moved on. As a campaign progresses, the base becomes more and more a point of departure for home, and at the close of operations it generally becomes the place whence the *personnel* and *matériel* which have been employed are sent back to the stations and depôts where they are to remain.

3. *Line of Communications.*¹

A line of communications generally consists of a chain of military stations connected together by a route of some description, and leading from the base to the army operating in the field. Its length varies from a few miles, such as intervened between Balacava and the British camp before Sebastopol, to a prodigious distance, such as separated the Nile expeditionary force at and beyond Korti from Lower Egypt. It may run mainly through friendly country, as was the case with the line from Durban to Mount Prospect during the late Boer war, or it may traverse hostile territory, as was the case with the line from Peshawur to Kabul in 1879-80. The route with which it coincides may be a carriage road, as would generally be the case on the continent of Europe, or it may be a route difficult for wheeled transport, as was the case in Afghanistan. It may be a track practicable only for pack animals, as in the Abyssinian expedition; it may be a river with steamers, sailing vessels, or boats on it, like the Irrawady in Burma; or it may be a combination of all of these. A railway will seldom, even on the Continent, form the sole route along the line of communications, although its existence, even along part of the line only, is of the utmost advantage.

The line of communications extending from Cairo to Metemmeh, at the time when British troops had penetrated to that point, offers a remarkable example of the various kinds of routes with which such a line may coincide, as also of the great distance to which it may extend. From Cairo to Assiut, 229 miles, there was both railway and river; from Assiut to Assuan, 318 miles, there was river; from Assuan to Philæ, 9 miles, there was a railway round the First Cataract; from Philæ to Wady Halfa, 210 miles, there was river; from Wady Halfa to Sarras, 33 miles, there was a railway which was continued a considerable distance during the campaign; from Sarras the river was of no great use as a route up to Hannek, a distance of 133 miles, and here a desert track had chiefly to be depended upon; from Hannek to Korti, 175 miles, there was river, but the number of boats was insufficient for the waterway to be made full use of; and from Korti to Metemmeh, 172 miles, there was a desert track only. The total length of the line of communications was thus 1,279 miles.

¹ See "Regulations for the Line of Communications of an Army in the Field."

As already stated the line of communications, as a rule but not always, includes the base, and a commandant of the whole is appointed. Except in the case of an expedition on a very small scale, the commandant will usually be a general officer, bearing the title of general of communications. For purposes of command and supervision the line is often divided into sections, each with its own commandant: each section includes a certain number of depôts and stations. The depôt nearest to the army in the field is as a general rule called the advanced depôt. The organization of a line of communications depends, however, on a great variety of circumstances, and no detailed or minute rules exist. The depôts and stations vary greatly in importance, and their composition and number depend very much upon the attitude of the population of the districts traversed. In the Nile expedition there were between Wady Halfa and Hannek, a distance of 166 miles, 9 stations; but 3 sufficed for the 766 miles between Cairo and Wady Halfa. There were 17 posts and stations during the last Afghan war between Kabul and Peshawur, on a stretch of only 170 miles, but the people of the country were very hostile. With an unfriendly population a large force is sometimes required to secure the line. Each depôt and station then becomes a defensive post, and flying columns may have to be posted at intervals, being kept quite distinct from the garrisons of the posts.

Hospitals, sick rest-stations, and commissariat, transport, and ordnance store depôts, are found at certain stations. There will generally be some points of especial importance, and these, in addition to comprising hospitals, depôts, and so forth, will often be the headquarters of sections, and sometimes of flying columns. Gandamak, on the Kabul-Peshawur line, was a station of this class, and it was also the headquarters of the general of communications.

The commandants of sections will generally be in the position of inspecting officers, as it is the practice to invest commandants of posts with especial powers. Troops are

constantly moving backwards and forwards along the line of communications, but the commandant of the post, who is, as a rule, specially appointed to take charge of it, is not superseded by the accidental presence of an officer senior to himself, who may be passing through. The officer commanding a post includes within the limits of his command the route on either side halfway to the next post. His authority is paramount on this stretch, and his responsibility for the regular and safe transit of troops, stores, &c., is complete. In a friendly country many of the posts are often merely rest-camps with a very small staff attached to them and with no garrison. The organization of posts and the subdivision of the line of communications into sections tends to decentralization, and this is of great importance in view of the extent of country on which the authority of the general of communications often extends. There is usually a telegraph or heliograph station.

In a theatre of war well supplied with railways, the positions of the larger hospitals, of depôts, of commissariat and ordnance stores and so forth, will depend very much upon those of the more important railway stations. Wherever there is a break in bulk in the conveyance of stores, a dépôt almost of necessity arises, for at such points accumulations will inevitably occur. The position of the more important hospitals on a line of communications is, of course, governed largely by hygienic considerations; but, if possible, they will, as a matter of convenience, be placed at points where the sick proceeding to the rear change their mode of conveyance.

The great military powers of the Continent possess elaborate regulations for the organization of lines of communications. Very large staffs, organized so as to ensure a satisfactory chain of responsibility, are told off. The units which act as the *personnel* of hospitals, of rest-stations for the sick, and of depôts of all kinds are already organized in peace time. The very varying conditions under which British troops are called upon to fight preclude, however, the laying

down of hard and fast rules. Those regulations that exist are intended rather as suggestions to assist a commander in framing a scheme to suit the particular circumstances of the case with which he has to deal, than as rules which he is bound to obey. And it is in this sense that they should be understood.

4. *Supply.*

As explained in earlier chapters, the supply of an army in the field is carried out by the army service corps, under the superintendence of the adjutant-general's department B. The supply of troops engaged on active operations is affected by a number of complex and varied conditions. In a rich productive theatre of war, intersected by a network of railways and canals, supply can be easily arranged for. But British campaigns are seldom carried out under such favourable conditions, and the question of providing food for the troops and animals operating in countries like Afghanistan and the Sudan is one of exceeding difficulty. Supply depends in the first place upon the resources of the theatre of war, and the facilities for utilizing these resources. It is, moreover, affected by the time of the year, by the climate, by the length of the line of communications, by the rapidity of the movements, by the temper of the inhabitants, &c. The extent to which the existing resources of the theatre of war can be utilized depends very much upon the available communications and transport. The character of the war, whether offensive or defensive, of course influences the question. But considerations of supply always affect, and in the case of irregular warfare often entirely govern, the course of operations.

The Nile expedition offers a remarkable example of the extent to which this is the case under certain conditions. This campaign was a campaign against time. A certain force had to be moved into the heart of the Sudan as rapidly as possible to achieve an object; but the rate of progress of the troops depended upon that of their supplies. The supplies

could not be advanced with sufficient rapidity. The troops had to be held back on this account, and as a consequence the expedition was seriously delayed.

An army operating in the field lives as far as possible on the country. When the resources of the country give out, or cannot be utilized, supplies have to be conveyed to the army from the rear. And as a force can seldom live entirely on the resources of the theatre of war, movable supplies must be arranged for to accompany it. There must, moreover, be stationary magazines for the collection of stores of food, and some method of replenishing the movable supplies from the stationary magazines has to be devised.

Movable supplies consist of—(1) rations carried on the soldier or horse, with us generally sufficient for two days' consumption; (2) those carried in the regimental and departmental transport, with us generally two days' supplies; (3) field magazines, or supply columns which follow the army, and the size of which depends upon the nature of the campaign.

Two examples of field magazines may be given. That accompanying the British force in the Abyssinian campaign consisted of 26,000 animals with 12,000 carriers and drivers, conveying supplies for the 40 days' march to Magdala. In the Nile expedition, when General Earle's column advanced by river from beyond Korti, 100 days' rations per man were carried in the boats; this field magazine represented the whole of the movable supplies accompanying that column, there being no regimental or departmental transport conveying food.

On the other hand, in a theatre of war where supplies are abundant, the supplies carried in the field magazine might not represent more than a week's rations per man and horse. The great military powers of the Continent have a regular establishment for their field magazines; the numbers of vehicles, &c., are laid down, and the transport, which is civilian, is placed under military supervision. No such arrangements exist in the United Kingdom.

Stationary magazines are established at the base and at various points along the line of communications. Important magazines would, moreover, sometimes be established in home or colonial territory. Stationary magazines may be classed

as (1) main or reserve magazines, (2) intermediate magazines, and (3) expense magazines. Main magazines would be usually established at the base; thus a main magazine was formed in the earlier days of the Peninsular war at Lisbon. Intermediate magazines are formed as the army advances, since time and transport would be wasted if it were to draw supplies direct from the base; these are fed as far as possible from the surrounding districts. Expense magazines form the current supply for the troops, and are established as they may be required; each commissariat *depôt* is, however, in a manner, an expense magazine, as detachments passing to and fro are supplied from it. No clear line of demarcation exists between main, intermediate, and expense magazines. The most important expense magazine is generally to be found at the advanced *depôt*, which is always pushed up as near to the field army as is consistent with safety. The troops supply themselves from the stationary magazines whenever it is practicable, and only draw upon the field magazine when the stationary magazines cannot be used. The Nile campaign illustrates this principle admirably. Stationary magazines were formed in advance of the troops during the first advance to Korti, from which they were rationed, the supplies in the boats or field magazine being kept intact. The system of making good the movable supplies from the stationary magazines is also very well illustrated by the intended arrangement for replenishing the supplies of the river column in this campaign. A convoy with about a month's rations for the troops was to have moved from Korosko across the desert to Abu Hamed to meet the column there, but the recall of the troops prevented the execution of the scheme. In this case Korosko formed an intermediate magazine, replenishing the field magazine, *i.e.*, the supplies in the boats.

Supply must be arranged for prior to the commencement of operations. In a rich well-populated tract, six weeks' supplies will sometimes be enough to begin with, of which perhaps those for, say, a fortnight would be "movable

supplies." But in a less favourable theatre of war a more liberal allowance must be made. In Egypt in 1882, two months' supplies were considered sufficient; but during the Afghan war, there was usually six months' reserve. Before the Nile expedition started from Wady Halfa, two months' supplies were collected to the south, and at the time when the river and desert columns were withdrawing to Korti there were stored up south of Assiut, about $3\frac{1}{2}$ months' supplies of meat and nearly six months' supplies of bread and groceries. It is usual to store six months' supplies in a fortress, but the amount depends upon whether or not the civilian population may have to be provided for.

Supplies are procured in time of war by contract, by purchase, or else by requisition. It will generally be the case that supply by contract can only be depended upon as long as the army is at a distance from the actual theatre of war, and the method is inadmissible if secrecy as to the general plan of campaign be essential. Contracts, it should be stated, proved fairly satisfactory in the Peninsular war; and in Belgium, the contractors fulfilled their engagements up to the time of Napoleon's advance, but when hostilities commenced they deserted. In minor expeditions they are generally impracticable in the theatre of war; but on the other hand, since secrecy is not in such cases so necessary supplies can be collected at home or near the theatre of war on the contract system. Supplies can usually be purchased in a theatre of war if they exist. In the Peninsula the troops lived mainly on food purchased on the spot; and later on when the theatre of war was transferred to French soil, the Duke of Wellington's army was well supplied by the people of the country, as everything was paid for, while the French troops operating in their own country could get little owing to their system of requisitions. Experience has shown that requisitions are generally a mistake, but in Afghanistan the system of requisitions on payment was employed with great success.

It is obvious that there is a close connection between the

question of supply and the question of transport. Supplies cannot be collected and cannot be distributed without some form of transport. It is for this reason that the supply and transport services form one department in the British army although the system does not generally obtain on the Continent.¹

5. *Transport.*²

The question of transport is one of great importance in the field. Without an efficient and adequate transport service, operations are liable to come to a standstill. The amount of transport required for an army depends upon a variety of circumstances—upon the nature of the theatre of war, upon the distance on which the operations extend, and upon the *ordre de bataille* of the troops. The existence of a railway or of railways necessarily relieves the military transport service if they can be employed. A railway train with two locomotives and 35 ten-ton wagons may be calculated to convey 350 tons a distance of 200 miles in a day, or in other words to represent 70,000 ton-miles for transport purposes; it would take 10,000 general service wagons to do the same amount of work. But our army can never depend entirely on a line of railway for its transport, and in many campaigns on which British troops have of recent years been employed, no railways have existed in the theatre of war. If the operations follow the course of a navigable river or of a canal and if steamers be available, water transport may be as valuable to the army as railway transport; but such conditions are not generally existent

¹ The relations between supply and transport are, as a rule, a matter of simple calculation, as is shown by the following:—Including the weight of the cases, a man's ration weighs about 3½ lbs.; a month's rations for 10,000 men therefore weighs a little more than 500 tons. Putting the load of a camel at 400 lbs., and that of a mule at 200 lbs., some 2,800 camels or 5,600 mules would suffice to carry this. Then, if the force included 1,000 horses and grain for these had to be carried, the total load, at 10 lbs. per horse, would be about 135 tons, requiring about 750 camels or 1,500 mules. The field magazine for the force would thus require little short of 4,000 camels or 8,000 mules for its transport. See also p. 561, as regards transport carrying its own supplies.

² See chap. xxi.

in a theatre of war. Transport by rail would be carried out under orders of the officer in charge of the railway, working in concert with the departments concerned; water transport will generally be under charge of the Royal Navy.

(a) *Land transport.*—In Chapters XIV. and XXI. the organization of the transport service in the British army has been explained. The establishments of battalions, of squadrons of cavalry, of batteries of artillery, &c., on a war footing include regimental transport. The tables have been drawn up to suit the conditions of active service in the United Kingdom, and in theatres of war such as would be found in most parts of Western Europe. But transport of this kind is totally unsuited to the exigencies of irregular campaigns such as British troops are so often engaged in. No nation, moreover, depends entirely on a military corps to form the transport for its armies. Civilian transport is always employed as an auxiliary to the organized military service in which soldiers act as drivers. And the nature of such civilian transport depends upon the nature of the theatre of war and upon the kind of transport employed by the people on the spot for purposes of trade, agriculture, and so forth. In a country where good carriage roads exist, the inhabitants will generally employ well constructed wheeled vehicles. The rougher the roads the rougher generally will be the vehicles in use. But it does not follow that because the roads are good plenty of transport suitable for military purposes will necessarily be forthcoming. Norway is an example that this is not the case, and in many countries two-wheeled vehicles are found almost to the exclusion of four-wheeled wagons, which latter are much better adapted for military purposes. When the wheeled transport existing in a country degenerates into more rudely constructed arabas drawn by oxen, such as form the only vehicles found in many parts of the Ottoman empire, it becomes a question whether for military purposes pack transport is not preferable. Vehicles of such very inferior classes are, however, exceptional.

The long Colonial ox and mule wagons and the American buck wagon have been largely used by British troops in South Africa. The ordinary four-wheeled wagon of the country was used in the Red River expedition. Two-wheeled carts were used in New Zealand, and a special one of light pattern gave satisfaction in the Crimea but was found unsuitable for drawing through heavy sand in Egypt. The "general service wagon" is very strongly built, but it is too heavy for a theatre of war destitute of good roads. Vehicles drawn by bullocks move very slowly, but they have formed a large proportion of the transport in many Indian campaigns. Wheeled transport is indeed almost always used, when possible, in preference to pack transport. Animals can, speaking broadly, draw a heavier load than they can carry. The light two-wheeled vehicle known in the service as the Maltese cart, will take a load of 6 cwt., and is drawn by one horse or mule; three mules would be required to carry the same load. A general service wagon will take a load of 30 cwt.; 8 or 9 camels would be required to carry the same load, they would take up about twice as much room on the road, and they would require about twice as much food as the 4 horses of the general service wagon. Pack animals are difficult to load, are liable to become unserviceable from sore backs, and are not, like draught animals, rested at each halt on the march. Moreover, loads of over 4 cwt. cannot be carried by them at all, unless elephants happen to be available.

But in mountainous country pack transport is always largely employed, and in roadless countries it entirely replaces wheeled transport. Elephants, camels, horses and ponies, mules, donkeys, and carriers, have all been frequently used for military transport. The characteristics of the various kinds of pack transport need not be gone into here, but the average loads carried may be mentioned. An elephant will take about half a ton, a camel about 400 lbs., horses and ponies from 120 to 250 lbs, mules about the same, donkeys seldom over 100 lbs., carriers 50 to 80 lbs. But

the carrying power of pack animals or carriers varies greatly. In India, where pack transport is thoroughly understood and where the military authorities can calculate upon securing a certain class of animal, general rules can be laid down; elsewhere the loads must vary considerably. If plenty of pack transport be available in or near the theatre of war transport officers can select; if not they must take what they can get and arrange the loads accordingly. Carriers formed practically the sole means of transport in Ashanti, and were largely employed in China; but they are troublesome to deal with, and require to be carefully organized. In carrier corps, indeed, what is generally one of the chief difficulties in organizing civilian transport, which will be discussed later, is seen in an aggravated form. Pack animals and wheeled vehicles alike require civilian drivers, and the provision of these, and their control when provided, often entail much trouble on the military staff of the transport service.

When transport is hired, the drivers generally are engaged with their own vehicles or animals, and this has the advantage of not only securing the requisite men, but of tending to ensure that they will attend to their duties. But hired transport has been proved by experience to be often more expensive in the long run than transport which has been bought outright and the drivers for which have been specially engaged or enlisted. It has been found that actually in the field hired transport has many inconveniences, although it is well suited for service in a friendly country on the line of communications. In any case, however, civilian *personnel* requires careful supervision and handling. It was found in the Nile expedition that the best camel drivers were those got from Aden; the camels were for the most part purchased in Egypt, but the drivers engaged there and on the Nile were not a success. And it is often found that the drivers have to be obtained quite separately and in a different locality from the actual transport. In most civilized countries transport can be impressed under the law of the land; but drivers cannot be impressed unless other-

wise subject to military law. In an enemy's country right of conquest permits an invader to impress the drivers as well as the transport; but such a course would not as a rule be adopted except as a local and temporary measure. A disaffected and unwilling *personnel* is almost worse than none.

The organization of a civilian transport service is always a work of considerable difficulty; the drivers are unaccustomed to military discipline and the officers and others in charge are often little acquainted with their language. A number of men, who do not know those set in authority over them or each other, are collected together and have to be formed into semi-military corps, generally at very short notice; in uncivilized or only partially civilized countries it is sometimes possible to group them under their own local chiefs, and this method has been generally adopted in the case of the carrier corps organized during British campaigns. But this is often impracticable, and under such circumstances certain of the men have to be selected and placed in authority over the rest. A military *personnel* has then to be added; and an endeavour must be made to establish a chain of responsibility, extending from the head of the transport service down to the driver or the coolie, and to break up the whole into units adapted to the circumstances of the campaign and to the organization of the forces engaged on it. Moreover the proper equipment of the drivers, animals, and vehicles, demands much care and attention. Clothing, and under certain circumstances, arms may have to be provided for the men; the animals will often require picketing gear, blankets, feeding gear and so forth; the vehicles will generally have to be adapted to the peculiarities of military requirements. With pack transport saddles often are a great difficulty, as they may not be procurable at all or else those accompanying the animals may not be suitable.

(b) *Water transport.*—Boat transport has on two occasions been used with great success by British troops—

viz., with the Red River expedition and during the Nile campaign.

During the advance from Ismailia to Kassassin in 1882, the boat service on the Sweet Water Canal proved invaluable for forwarding supplies at a time when the land transport was severely strained. Towards the close of the Afghan war sick were sent down from Jellalabad by rafts on the Kabul River. But the Red River expedition and Nile campaign are peculiar in that the troops manned the boats themselves and carried their own provisions and stores.

Every other form of transport involves the addition of useless mouths to the force. Transport animals and carriers require food, and in a theatre of war where supplies are scarce they have to carry their own. Then if great distances have to be traversed nearly the entire transport capabilities of the animals or carriers may be exhausted in conveying their own food; and a point may be reached when they are not only no longer capable of carrying stores for the troops, but when they cannot even carry the supplies necessary for their own consumption. A camel can only carry about one month's rations for itself; therefore, assuming that it can march a distance of 15 miles a day, it cannot traverse more than 450 miles of foodless desert, while if a march of 225 miles has to be made it can only carry half a load of stores for the troops. In the Nile expedition each of the whalers specially sent out from home carried 100 days' rations for its crew, and the troops in the boats practically formed their own transport.

If steamers are available on a river they are admirable for transport purposes, being able to carry large supplies of stores and also to tow loaded barges, rafts, &c. Owing to the steamer service on the Nile below Wady Halfa there was practically no difficulty in conveying stores and supplies up to that point during the campaign. Under favourable circumstances, as stated, water transport may become as valuable to an army as railway transport, and it has the advantage that it is less likely to be thrown out of gear by a hostile incursion into the territory in which it is being worked.

6. *Intelligence Department.*

For the successful conduct of operations in the field a full knowledge of the theatre of war and correct information as to the strength, the dispositions, and the intentions of the enemy are almost indispensable. During peace time the Intelligence Division of the War Office, as has already been shown in Chapter XXIV., studies the geography, resources, climate, available transport, and so forth, of all foreign countries; and collects and collates information as to their armies, their fortresses and their military system. But when hostilities break out or are imminent, it becomes necessary to create a special service within the theatre of war for the purpose of supplementing, on the spot, the information already acquired. Hence a local intelligence department attached to the army in the field has to be formed.

The creation of a special department for this purpose is a somewhat recent innovation. Formerly, what may be called intelligence duties were confided to officers of the general staff belonging to the old Quartermaster-General's department, in addition to their other functions. But the importance of an efficient intelligence service has of late years been better appreciated than was formerly the case, and during the Egyptian campaign of 1882, the Nile campaign, and the Suakin campaign of 1885, an intelligence department was always formed as a more or less distinct branch of the general staff of the expeditionary forces employed. It has, moreover, been decided that in future campaigns of any magnitude such a department, to be called the Field Intelligence Department, will always be organized; and the object and duties of this department have been definitely laid down in a manual. The field intelligence department is charged with the duty of obtaining from all available sources information as to the plans and movements of the enemy, and as to the ethnography, geography, and topography of the theatre of war. The department has charge of the interpreter service of the army, and it supplies the requirements of the troops

in this respect, and also as regards guides should they be needed. Interpreters may be either officers or civilians, and they are divided into classes according to their qualifications; all are under the chief interpreter, who will be attached to the intelligence department at the headquarters of the army in the field.

The organization and composition of the department will necessarily vary in accordance with the organization and composition of the army in the field, and with the scale on which the operations are to be carried out. During the Nile expedition there were, when the troops were beyond Korti, practically three distinct branches of the department, one at Gubat, one at Jakdul post, and one with the river column, in addition to the central branch at Korti. This formation of distinct branches may at any time be dictated by circumstances; but to establish such branches for the performance of intelligence duties exclusively, would be exceptional. The commandant of every detached post is bound to find out what he can, and to transmit any news of importance to the branch of the field intelligence department told off to the force of which his command forms part. A branch of the department would generally consist of one or more officers, assisted by interpreters, by police, and by some non-commissioned officers and men to act as clerks, orderlies, servants, &c. The officer in charge of the branch is directly under the orders of the general or other officer commanding the force, or the part of the force to which the branch is attached.

Formerly survey work and the preparation of sketches, plans, &c., in the theatre of war were entrusted to the intelligence department; but it has been decided that such work will not in future be carried out by it. Survey work demands special qualifications; and since intelligence duties call for not only a thorough knowledge of the military art, combined with quickness, with decision, and with great tact and judgment, but also often demand linguistic ability, the difficulty of finding officers fulfilling those conditions, who are also efficient surveyors, has led to the change. Infor-

mation as to the arrangements existing for the carrying out of surveys and reconnaissance work in the field is given at the end of this chapter.

The value of a good intelligence department to an army engaged in active operations can scarcely be exaggerated. But unless the troops co-operate with and assist the department it suffers in efficiency and loses in usefulness. Strangers from whom important information may be obtained will seldom come in contact with members of the department in the first instance; such persons reach the outposts, or come into camp, and if they are frightened or are injudiciously questioned, the information they possess may never reach the proper quarter. The inhabitants of the theatres of most of our small wars need to be handled with tact. Their examination is an art which men of great ability and professional knowledge may never acquire. A grasp of the situation, moreover, is required, such as only those who are in high position, or who are members of the field intelligence department can generally command. It is, therefore, most important that officers and men of a force operating in the field should aid the intelligence department by bringing persons who seem to be possessed of valuable information straight to the department, to be dealt with.

7. Press Censorship. Postal and Telegraph Services.

Of equal importance with the possession of complete and correct information with regard to the enemy is the making of adequate arrangements for preventing information from reaching the enemy. This danger is to a certain extent provided against by the appointment of a staff officer as press censor. The duty of this officer is to control the correspondence of such representatives of newspapers as may have been permitted to accompany the army.

A *postal service* has, as a rule, to be established in the field under military control. Its organization is generally

carried out under the orders of the general of communications. For the Egyptian campaign of 1882 the necessary staff was obtained from the Post Office Volunteer Corps, and during the Nile expedition it consisted partly of non-commissioned officers who had some training in postal work and partly of Egyptian *employés*. The necessary transport for conveying the mails, if railways, steamers or regular post carts are not available, is supplied from the transport of the army. When there is a regular postal service in existence in the theatre of war this would of course be made use of when practicable. In close proximity to the enemy, or in districts where the population is hostile, the post requires an escort; under such circumstances despatches and orders will generally be sent by special messenger with a small escort. In a prolonged campaign and under favourable conditions a parcel post may be established. A postal service can sometimes be arranged to be worked by contract under military supervision, and as regards the actual transport of the mails this system has been found very convenient.

The *telegraph service* will generally make use of any existing telegraph lines, new lines only being constructed by the telegraph corps when these fail. The extent to which the existing telegraph system is to be controlled by the military authorities depends upon circumstances; but it is almost always necessary that some supervision should be exercised. Rules are generally framed to suit each particular case, but all telegrams despatched from the front are required to be approved and signed by the press censor, unless they are official. It is sometimes necessary to appoint a censor for telegrams sent in the language of the country; this was done during the Nile expedition, the censor being posted near the base, at Assuan. The organization of the military telegraph service has been explained in Chapter XIII., and the system of having a trained staff belonging to the Post Office, which can be called upon in time of war has in practice proved very satisfactory.

During the Ashanti war, at forty-eight hours' warning, a complete force trained in the postal telegraph service was sent out with stores, &c., drawn from the Post Office, and achieved signal success. During the Zulu war some of the colonial lines were taken over and worked by military *personnel*, and in 1882 the existing telegraph lines were similarly worked, up to the time of the capture of Cairo. During the Nile expedition the telegraph service proved of immense importance. A line existed from Cairo to near Korti, and this was continued for 89 miles to Hamdab, the entire length of the wire from Cairo to Hamdab being 1,169 miles; from Cairo to Wady Halfa, which was more than half this distance, the line was maintained by the Egyptian telegraph department, and along this stretch interruptions frequently occurred; the rest of the line was worked partly by military and partly by Egyptian *personnel*, but was entirely under the control of the director of telegraphs. Beyond Wady Halfa there was but a single wire, and, as an example of the strain thrown upon the telegraph service in this campaign, it may be stated that on one night 17,000 words were by this one wire signalled from Korti. 188 miles of new line were laid down, and 40 miles of the existing line were renewed, the old poles being used.

Signallers.—The heliograph has been found a most valuable assistant to the telegraph service in recent British campaigns, and has in some cases taken its place. For the employment of this instrument certain atmospheric and topographical conditions are of course necessary; but when circumstances have been favourable, as was the case in Afghanistan, it has proved of great value, and has enabled communication to be opened between detached forces, and to be maintained where telegraph lines have been cut by the enemy. The heliograph proved very useful during the Boer war, on the line of communications from Newcastle to Pietermaritzburg. It has been the usual practice to form a special corps of signallers under an officer of experience attached to the staff of an expeditionary force. The corps is supplied with flags, lanterns, and other stores used for signalling, in addition to the heliograph equipment, and can be employed actually on the battle-field if occasion arises. There are also regimental signallers, but these are kept quite distinct as a rule from the special corps of signallers.

8. *Surveys and Reconnaissance in the Field.*

Though survey work is, of course, quite distinct from reconnaissance, both can conveniently be treated of under one heading in a brief sketch such as it is proposed here to give. In every campaign, whether in civilized and mapped, or in uncivilized and unmapped countries, military sketching and reconnaissance of roads, rivers, positions, camping grounds, bivouacs, railway stations, &c., will have to be undertaken by staff or other officers. But in countries, of which absolutely accurate surveys exist, and which have been prepared almost invariably under the military authorities, it is evident that no army operating therein would require to provide for elaborate survey work. Hence, it is only necessary to consider the question of what arrangements would have to be made for survey and reconnaissance work in countries of which no trigonometrical survey exists, such, for example, as the greater part of Africa, and in other countries and islands of which geographically and topographically but little is as yet known. As to reconnaissance the importance of a knowledge of military topography has been fully recognised in the army, and all regimental and staff officers are now qualified to make an intelligible military sketch and report. Therefore, during the many small campaigns in which our army has taken part, there has been no lack of material from which to find good reconnoiters and military sketchers. It used to be the custom for the Quartermaster-General's department to deal with the question of military sketching and reconnaissance in the field, and to employ specially qualified officers for that purpose.

As examples of what has been done in recent years it may be cited that in the Ashanti war of 1873-4 a deputy quartermaster-general with officers-working under him was specially detailed to superintend the military sketching and reconnaissance. During the Afghan campaign of 1878-80 the topographical work was executed by officers of the

- Indian Survey acting under the immediate direction of the chief of the staff. During the Sudan campaign of 1884-5 this work was done under the general commanding the communications and the officers commanding columns in the field. Again during the Burmese war of 1886-7 officers acting under the head of the military staff were employed for a similar purpose.

For trigonometrical survey work, however, the case is different. This is a subject which requires much study, aptitude, and practice, and can only be entrusted to officers who have been specially instructed and who have proved themselves capable. Hence, at home, it has been arranged that the Director-General of the Ordnance Survey shall always have in readiness a certain number of officers, non-commissioned officers, and sappers of the Royal Engineers,¹ who are kept in practice and are available at any moment to be sent abroad for survey work wherever their services may be required,² and are organized in survey sections. In India the department of the Surveyor-General of India is admirably organized for the purpose, and can supply at a moment's notice a staff of trained officers and native subordinates for survey work in the field.

In that country it has long been the custom to attach to each column in the field a survey party detailed by the Surveyor-General, working in conjunction with a staff of native soldiers employed under the intelligence department and specially trained in the use of the plane table. By this means valuable survey work has been done on the North-West Frontier, in Burma, &c.

Although the final arrangements for the execution of survey work in the field are not actually elaborated, the following sketch may serve to show what would probably be done to meet the requirements in the event of our despatching an expeditionary force to an unsurveyed theatre of war.

¹ See chap. xxv., "Ordnance Survey."

² Excellent work has already been done by some of these in the various boundary commissions in various parts of Africa.

- (1) The Intelligence Division of the War Office, which keeps up to date and compiles maps of all countries to which a force might have to be sent, will supply the troops with the best maps available, and with these they will work at starting.
- (2) One or more survey sections of the Royal Engineers from the Ordnance Survey Department each consisting of one officer and six men, with proper equipment and stores, will form part of the force. They will be employed under the orders of the Chief of the Staff. Their duty is to carry out military surveys of a more extensive nature than what would come under the head of reconnaissance, though they will also be trained to the latter work so as to be available to undertake it if required. They would work with the plane table and theodolite and take astronomical observations, &c.
- (3) A certain number of staff and regimental officers who are specially apt at military sketching and reconnaissance might also be employed under the Chief of the Staff in the field on that particular work.
- (4) The Chief of the Staff will have such of these sketches as may be required reproduced on the spot by the Royal Engineer field park, which is supplied with photographic and lithographic appliances for the purpose, and will issue the maps so reproduced to the troops, and forward copies to the home Intelligence Division in London, where all new topographical matter will be utilized for correcting the existing maps of the theatre of operations; and fresh supplies of these maps so corrected will be sent out with the least possible delay to the army in the field. In the meantime, the troops will avail themselves of maps corrected locally, and of the sketches made and reproduced on the spot.

In the event of a campaign extending over a considerable period, the work of keeping an army in the field supplied with maps is a very considerable and important one, and would necessarily cause a great strain on the resources of the topographical section of the Intelligence Division of the War Office. This latter, however, would be backed by the valuable co-operation of the Ordnance Survey Department, and would also be able, if necessary, to call in the assistance of the trade, so that it should be perfectly able to cope with the heavy work thrown on it.

The work of reproducing military surveys and maps in the field at the shortest possible notice is one of vast importance, and has received careful consideration, the outcome of which is that the Royal Engineer field park is now provided with all the necessary appliances, which are carried in special photographic and lithographic wagons. The

process of reproduction will be mainly that of photozincography. But before a sketch or map can be satisfactorily reproduced by photography it must fulfil certain requirements as to style of execution, colour, &c. ; and much thought and practice will be necessary before the most satisfactory solution of the problem can be arrived at. The question is, however, not being lost sight of, and it is probable that at future manœuvres opportunities will be given for fully testing the arrangements under service conditions.

APPENDIX.

TABLES OF FIELD ESTABLISHMENTS, HOME DEFENCE, AND
SERVICE ABROAD.

TABLES.

						Home Defence.	Service Abroad.
Staff Units..	..	..	..	..	..	i	xii
Infantry ..	..	..	..	..	..	ii	xiii
Cavalry ..	..	..	..	..	..	iii	xiv
Artillery Units	..	..	..	..	..	iv	xv
Engineer Units	..	..	..	..	..	v	xvi
Army Service Corps Units			..	..	..	vi	xvii
Medical Units	..	..	..	..	..	vii	xviii
Infantry Brigade on War Establishment					..	viii	xix
Cavalry Brigade	..		..		..	ix	xx
Infantry Division	..		..		..	x	xxi
Cavalry Division	..		..		..	—	xxii
Army Corps	..		..		..	xi	xxiii

TABLE I.

HOME DEFENCE.—STAFF UNITS.

	Infantry Brigade.	Cavalry Brigade.	Infantry Division.	Army Corps.	Remarks.
General Commanding	1a	1a	1c	1	a Major-Generals.
Aides-de-Camp	1	1	2	4	b Has charge of all the horses in the brigade except A.S.C.
Deputy Adjutant-General ... ..	...	...	...	1	c Staff Clerk.
Assistant Adjutant-Generals ... ..	...	...	1	30	d D.A.C. Gen. Ord- nance.
Deputy-Assistant Adjutant-Generals ... ..	...	...	2f	30	e Lieut.-General.
Commandant, headquarters ... ..	...	...	...	1	f { 1 for A Duties. 1 " B "
Brigade-Major	1	1	...	...	g Assistant Provost- Marshal.
Provost-Marshal ... ..	...	...	1g	1	h Adjutant, R.A. —
Officer Commanding R.A. ... ..	...	...	1	1	i Lieut.-Col., R.E.
Brigade-Major, R.A. ... ..	...	...	1h	1	j Adjutant, R.E.
Aide-de-Camp, R.A. ... ..	...	...	...	1	k Surgeon-Colonel.
Chief Engineer ... ..	...	...	1i	1	l A.C.G. Ordnance.
Brigade-Major, R.E. ... ..	...	...	1j	1	m One acts as Quarter- master-Sergeant when required.
Aide-de-Camp, R.E. ... ..	...	...	...	1	n Clerks for D.A.A.G. (B).
Principal Chaplain ... ..	...	...	...	1	o { 2 for A Duties. 1 " B "
Chaplains	1	1	2	1	p Has charge of all corps troops not otherwise provid- ed for, viz., A.C. Staff, corps bat- talion, and Army Signallers. He also acts as Or- derly Officer to P.V.O.
Principal Medical Officer ... ..	...	...	1k	1	Staff baggage is allowed on the following scale— lbs.
Surgeon-Majors ... ..	...	...	1	2	General ... 135
Orderly Medical Officer ... ..	...	...	...	1	Lieut.-General 100
Deputy Commissary-General (Ordnance) ... ..	...	1d	1l	1	Major-General or Brigadier 75
Principal Veterinary Officer ... ..	...	...	1	1	Staff Field Officers ... 45
Veterinary Officer	1b	...	...	1p	Other Officers in this Table 30
Total Officers	5	5	17	29	Clerks... 10
Clerks in Adjutant-General's Office (A)	1c	1c	3m	5+m	
Clerk to Officer Commanding, R.A. ... ..	...	...	1	1	
Clerk to Chief Engineer ... ..	...	...	3	1	
Clerk to Medical Department ... ..	...	...	1	3	
Clerks to Dep. Com.-Gen. (Ordnance) ... ..	...	...	1	2	
Clerk to Principal Veterinary Officer ... ..	...	...	1	1	
Compounder to Surgeon-Major ... ..	...	...	1	1	
Orderly to Principal Medical Officer ... ..	...	...	...	1	
Orderly to Surgeon-Major ... ..	...	...	1	1	
Servants and Bâtmen... ..	9	9	29	54	
Total other ranks	10	10	41	70	
Field Intelligence Department.					
Assistant Adjutant-General... ..	...	...	...	1	
Deputy Assistant Adjutant-General ... ..	...	...	...	1	
Clerks, R.E. ... ..	...	...	...	2	
Military Mounted Police ... ..	...	...	...	5	
Servants and Bâtmen... ..	...	...	...	4	
Attached.					
Military Police (Officers) ... ..	...	...	...	1	
Mounted ... ..	...	5	10	11*	
Foot	10	...	...	11*	
Army Service Corps (Officers) ... ..	...	...	1	1	
Transport	3†	3	9	19	
Supply (Clerks) ... ..	...	...	4*	3*	
Post Office Corps { Officers ... ..	...	...	...	2	
{ Men	4	2	4	7	
Grand Total	29	22	72	144	
Horses	3	3	14	23	
	9	18	45	94	
	4	4	14	27	

* Including one Warrant Officer. † Details shown in italics are provided by Army Service Corps and are excluded from the Staff totals.

HOME DEFENCE.—INFANTRY.

	Battalion.	Detail left at place of concentration (a).	Company in the field.	Section with 2 machine-guns (f).	Signallers. Dismounted company.	Mounted infantry (j).			Remarks.
						Battalion (8 companies).	Detail left at place of concentration (a).	Company in the field.	
OFFICERS AND MEN.									
Officers	29*	...	3	1	2	48*	...	5	(a) To be deducted from battalion establishment to obtain field strength. (b) 1 belongs to dismounted party. (c) 9 belong to dismounted party—two privates are trained as stretcher bearers. (d) Horses and drivers provided by A.S.C. (corps troops company). (e) Of these two privates are trained as stretcher bearers. (f) Detail with machine-gun sections is in excess of field establishments of battalions to which they are attached. The mounted infantry machine-gun sections consist of 1 officer, 2 N.C.O.'s, 8 privates, 7 drivers, with 7 riding and 14 draught horses; 2 machine guns, 1 forage cart, and 2 S.A.A. wagons.
Warrant officers and sergeants	51	3	5	1	2	61	2	6	
Drummers and buglers...	16	...	2	...	...	16	...	2
Pioneers and artificers ...	13	...	...	...	...	40	...	5 (b)
Band	20	...	...	...	...	...	...	...
Corporals... ..	41	...	5	2	30 {	48	...	6	
Privates	824	...	100 (e)	5		799	...	97 (c)	
Privates as drivers ...	17	...	2	4		49	...	6	
Privates as wagonmen...	...	...	...	...	...	16	...	2
Company storemen ...	...	8	...	...	...	...	8	...
Total all ranks ...	1,011	11	117	13	34	1,077	10	129	
HORSES AND PACK ANIMALS.									
Officers (private) ...	6†	...	...	...	2	97‡	...	10
Officers (public) ...	1	...	...	...	...	...	...	...
Riding	1	...	...	...	...	878	...	108
Draught	30	...	2	6	...	98	...	12	
Pack animals	2§	...	...	...	...	...	...	...
Total all kinds ...	40	...	2	6	2	1,073	...	130	
WAGONS, CARTS, &C.									
Wagons {	G.S. (4-horse)	4||	...	...	...	16¶	...	2
	S.A. ammunition (4-horse) ...	...	...	...	...	8	...	1
Carts {	S.A. ammunition (2-horse) ...	4	...	1	1	...	...	...
	forage (2-horse) ...	...	...	1	3 (d)	1	...	...
	intrenching tool (2-horse) ...	1	...	...	...	...	...	...
Machine-guns (1-horse)		...	...	2	...	...	...	...
Total vehicles ...	9	...	1	4	3	25	...	3	

* 1 Lieut.-Colonel, 1 mounted Major, 3 dismounted Majors, 5 Captains, 16 Subalterns, 1 Adjutant, and 1 Quartermaster, with 1 Medical Officer attached. In mounted infantry, 1 Lieut.-Colonel, 1 Major, 8 Captains, 32 Subalterns, 1 Adjutant, 1 Quartermaster, and 4 Veterinary Officers (i.e., 1 Veterinary Officer to each two companies attached to 1st, 2nd, 3rd, and 4th cavalry brigades).
† 2 for Lieut.-Colonel, 1 each for Major, Adjutant, Quartermaster, and Medical Officer.
‡ 3 each for Lieut.-Colonel and Major; 2 each for Captains, Subalterns, and Adjutant; 1 for Quartermaster.
§ For ammunition.
|| 1 for headquarters, 2 for companies, and 1 for supply.
¶ 12 for companies, and 4 for forges.

TABLE III.

HOME DEFENCE.
CAVALRY.

	Cavalry of the Line.			Household Cavalry.			Section with 2 machine-guns.	Remarks.
	Regiment.	Details left at place of concentration (a).	Squadron in the field.	Regiment.	Detail left at place of concentration (a).	Squadron in the field.		
OFFICERS AND MEN.								
Officers	31*	...	6	27*	...	5	1	(a) To be deducted from establishment to obtain field strength.
Warrant officers and sergeants	44	3	8	43	2	8	2	
Trumpeters	8	...	2	8	...	2	...	(b) Of these 17 are dismounted; two privates of the mounted party are trained as stretcher bearers.
Artificers	22	...	5	21	...	5	...	
Band	15	(c) Of these 15 are dismounted.
Corporals	32	...	8	16	...	4	...	
Privates	435	...	106 (b)	286	...	65 (c)	8	
Privates as drivers	25	...	4	25	...	4	7	
Squadron storemen	...	8	...	...	8	...	...
Total all ranks ...	612	11	139	426	10	93	18	
HORSES AND PACK ANIMALS.								
Officers (private) ...	88†	...	18	76†	...	15	3	(d) Includes 4 pack horses for pack saddle tool cases, i.e., 1 with each squadron.
Riding	457	...	112	285	...	69	4	
Draught	54 (d)	...	9	54 (d)	...	9	14	
Total all kinds ...	599	...	139	415	...	93	21	
WAGONS, CARTS, &c.								
Wagons { S.A. ammunition (4-horse) ...	4	...	1	4	...	1	2	
	8‡	...	1	8‡	...	1	...	
Carts, forage (2-horse) ...	1§	...	...	1§	...	...	1
Machine-guns (2-horse)...	...	...	...	...	...	...	2
Total vehicles ...	13	...	2	13	...	2	5	

* 1 Lieut.-Colonel, 3 Majors, 6 Captains, 16 Subalterns (in Household cavalry 12), 1 Adjutant, 1 Quartermaster, with 1 Medical Officer and 2 Veterinary Officers attached.
† Quartermaster, 1; Medical and Veterinary Officers, 2 each; all other officers, 3 each.
‡ 1 for pack saddle forges, 3 for equipment, and 4 for squadrons.
§ 1 for headquarters (supply).

HOME DEFENCE—ARTILLERY UNITS.

	Regimental Staff of corps artillery.	12-pounder batteries.		Ammunition columns.			Remarks.
		R.H.A.	Field.	Infantry division.	Corps troops (c).	Cavalry brigade.	
OFFICERS AND MEN.							
Officers	11§	5*	5*	3†	3†	4‡	Left at place of concentration.
Staff-sergeants and sergeants	3	9	9	10††	10††	8††	
Trumpeters ... ..	...	2	2	2	2	2
Artificers ... ..	...	9	8	11	11	7
Corporals ... ..	...	6	6	6	6	4
Bombardiers ... ..	...	6	6	6	6	4
Gunners... ..	12	74	76	48	42	28	
Drivers	1	68	69	110	104	61	
Storeman ... ..	...	1	1	...	...	...
Total all ranks ...	27	179 1	171 1	196	184(c)	108	
HORSES.							
Officers (private)	22	11	1	1	1	3	
Officers (public) ... ..	...	...	5	3	3	3
Riding ... ..	...	74	23	22	22	18
Draught	2	106	102	196	184	82	
Total all kinds	24	191	131	222	210(c)	106	
GUNS, WAGONS, AND CARTS.							
Guns (6-horse)...	6	6	(a) 4-horse.
Ammunition wagons (6-horse)	...	6	6	6	10	6	(b) Two 4-horse.
Forge wagons (6-horse)	1	1	1	1	1	(c) This table is drawn up assuming there are 5 batteries to be provided for in the corps troops ammunition column. The 1st army corps for home defence has six batteries in its corps artillery, hence 2 ammunition wagons with limber R.A., and 2 ammunition and store wagons R.A. for gun ammunition must be added to its corps troops ammunition column. This entails an addition of 4 gunners, 12 drivers, 24 draught horses, to the establishment here given.
Ammunition and store wagons (6-horse) ... ..	...	1 (a)	1 (a)	20	15 (b)	2
Store wagons with limber (4-horse)... ..	...	1	1	...	...	...
Artillery wagons (4-horse) ...	...	2	2	...	...	...
Spare gun carriages (4-horse)	...	...	...	1	4	1
S.A. ammunition carts (2-horse) ... ..	...	...	...	10	2	8
S.A. ammunition wagons (4-horse) ... ..	...	...	...	...	...	...
Forge cart	1	...	...	...	...	...
Total vehicles	1	17	17	38	32(c)	18	

* 1 Major, 1 Captain, 3 Subalterns. [A Medical Officer and 2 Veterinary Officers are assigned to field artillery divisions whether these divisions are in the corps artillery of an army corps or with infantry divisions. 1 Medical and 1 Veterinary Officer are assigned to the horse artillery divisions in the corps artillery of an army corps.]
† 1 Major, 2 Subalterns.
‡ 1 Major, 2 Subalterns, 1 Veterinary Officer.
§ 1 Colonel Commanding corps artillery and Adjutant; 1 Lieut.-Colonel Commanding horse artillery and Adjutant; 1 Lieut.-Colonel Commanding field artillery and corps troops ammunition column and Adjutant—1 Medical and 1 Veterinary Officer with horse artillery division, and 1 Medical Officer and 2 Veterinary Officers with field artillery division.
†† Includes 1 Warrant Officer (Sergeant Major).

TABLE V.

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HOME DEFENCE.—ENGINEER UNITS.

	Regimental Staff of corps engineers	Field company.	Mounted detachment.	Pontoon troop.	Telegraph battalion (H.Q. and 4 sections).	Field park.	Balloon section.	Remarks.
OFFICERS AND MEN.								
Officers	6†	6*	4‡	3†	6†	1	3†	
Staff-sergeants { mounted ...	...	2	6	5	7	1	1	
and sergeants { dismounted ...	1	6	...	3	5	...	2	
Trumpeters, mounted ...	...	1	3	2	4	...	...
Buglers, dismounted ...	...	1	...	...	...	...	1	
Artificers { mounted ...	...	1	1	3	5	2	...	
{ dismounted ...	...	...	...	10	...	2	...	
Corporals { mounted ...	...	3	7	8	8	3	2	
{ dismounted ...	...	15	1	12	13	...	6	
Sappers { mounted ...	...	...	59	...	...	...	22	
{ dismounted ...	...	133¶	12¶	57	87¶	5	16	
Drivers	5	40	26	93	} 111 {	30	...	
Wagonmen ... ..	...	5	...	16		...	...
Total all ranks	12	213	119	212	246	44	53	
HORSES AND PACK ANIMALS.								
Officers (private)	8	12	8	6	12	2	6	
Riding ... ..	...	5	82	14	31	3	3	
Draught	2	38	24	162	126	44	32	
Pack animals ... ..	...	5	6	...	...	...	...
Total all kinds	10	60	120	182	169	49	41	
WAGONS AND CARTS.								
G.S. { for technical equip- Wagons { ment (6-horse) ...	...	...	...	2 (a)	4 (b)	6 (a)	6 (a)	(a) 4-horse. (b) The transport here given is that with H.Q. and 4 air line sections. The transport for H.Q. and 4 cable sections is 1 forage cart, 8 cable wagons (6-horse), 8 G.S. wagons R.E. (for technical equipment), 5 G.S. wagons R.E. (for supply). H.Q. and 4 sections may be composed of H.Q., 1 cable section, and 3 air line sections, or other combination.
{ for supply (4-horse) ...	...	...	...	3	5 (b)	...	...
{ for forge (4-horse) ...	...	1	...	1	...	1	...	
S.A. ammunition wagons (4-horse) ... ..	...	...	3	...	...	...	...
Pontoon and trestle wagon (6-horse) ... ..	...	2 (a)	...	20	...	...	...
Telegraph { air line (6-horse) ...	...	...	...	...	12 (b)	...	...
Wagons { cable (6-horse) ...	...	...	...	...	...	...	...
Lithographic (or photographic) and printing wagons (4-horse) ...	...	...	...	...	...	2**	...	
Forage carts { for company equip- (2-horse) { ment and supply	1	3	6	1	1 (b)	2	2	
Cart, tool, double { for technical R.E. (4-horse) { equipment	...	4	...	...	...	...	...
Total vehicles	1	10	9	27	22	11	8	

* 1 Major, 1 Captain, 4 Subalterns, with 1 Medical Officer attached when the company forms part of an infantry division, and the Veterinary-Lieut.-Colonel of the division will make the necessary arrangements for the veterinary charge of the company.
† 1 Captain, 2 Subalterns.
‡ 1 Major, 1 Captain (or Lieutenant), 4 Subalterns.
§ 1 Major, 1 Captain, 2 Subalterns.
|| 1 Lieut.-Colonel and 1 Lieutenant, with 2 Medical and 2 Veterinary Officers attached for duty with corps engineers.
¶ Includes storeman left at concentration place.
** If required, both lithographic and photographic wagons may be taken, men and horses to be added accordingly, including 3 lithographers for a lithographic wagon.

HOME DEFENCE

ARMY SERVICE CORPS UNITS.

	Company with infantry brigade.		Company with cavalry brigade.*		Company with infantry division.		Company with army corps headquarters and corps troops.		Company organised as a field bakery.	
	Transport.	Supply.	Transport.	Supply.	Transport.	Supply.	Transport.	Supply.	Transport.	Supply.
OFFICERS AND MEN.										
Officers	8†	2	8†	2	4†	2	4†	2	5†	...
Warrant officers and ser- geants	7	3	8	3	7	5	7	6	11	8
Artificers	14	...	11	...	11	...	11	...	12	...
Trumpeters	1	...	1	...	1	...	1	...	2	...
Corporals	7	2	7	3	7	3	7	2	7	13
Privates and drivers ...	92	6	111	6	70	5	93	5	168	96
	124	13	141	14	100	15	123	15	205	117
Total all ranks ...	137		155		115		138		322	
HORSES.										
Officers (private)** ...	2		2		4		4		1	
Officers (public)	3		3		3		3		4	
Riding	9	1	10	1	12	2	11	1	23	...
Draught	136	...	172	...	90	...	136	...	248	...
	151		188		111		155		276	
Total all kinds ...	151		188		111		155		276	
WAGONS AND CARTS.										
Wagons { G.S. (4-horse)	3	13	3	19	4	9	7	20	31	...
{ forage (4-horse)	1	...	1	...	1	...	1	...	1	...
Carts { forage (2-horse)	3	...	2	2	2	...	3	...	...	...
{ water (2-horse)...	1	...	1	...	1	...	1	...	6	...
Ovens ... ..	...	...	...	...	...	...	...	...	24	...
	8	13	7	21	8	9	12	20	62	...
Total vehicles ...	21		28		17		32		62	

* The establishment here given is that for the 2nd cavalry brigade. For the establishment of 1st cavalry brigade the following must be deducted from the 2nd cavalry brigade:—6 warrant officers, non-commissioned officers and men, 12 draught horses, and 3 G.S. wagons. For the establishment of the 3rd and 4th cavalry brigades the following must be deducted from the 2nd cavalry brigade:—2 non-commissioned officers and men, 4 draught horses, and 1 G.S. wagon.

† Including 1 Medical Officer attached.

‡ Including 1 Veterinary Officer attached.

** Including horses for Medical and Veterinary Officers.

HOME DEFENCE.
MEDICAL UNITS.

			Transport attached from Army Service Corps company.	
	Bearer company.	Field hospital.		

* 1 Surgeon-Major and 2 Surgeon-Captains or Surgeon-Lieutenants.
† 1 Surgeon Lieut.-Colonel, 1 Surgeon-Major, 2 Surgeon-Captains.
2 P 2

HOME DEFENCE.—A CAVALRY BRIGADE ON WAR ESTABLISHMENT.

Composition.	Officers and Men.		Horses and Pack Animals.		Machine-guns (2-horse).	Guns (6-horse).	Carriages.			Total vehicles, guns included.	Remarks.
	Officers.	Total all ranks.	Officers.	Troop, pack, and draught.			Carts (2-horse).	Wagons, various (4-horse).	Wagons, various (6-horse).		
Staff	5	22	13	5	The baggage of the brigade staff is carried in 1 G.S. wagon furnished by the brigade A.S.C. company.
3 regiments	93	1,803	264	1,533	..	..	3	36	..	39
	1	18	3	18	2	..	1	2	..	5	
Mounted detachment, R.E.	6	180	13	180	..	6	..	4	7	17	(a) Draught-horses and drivers supplied by the A.S.C. company.
2 companies mounted infantry with unit column	4	108	3	103	..	..	8	1	9	18
2 companies mounted infantry with headquarters detail attached	4	118	8	112	..	..	6	3	..	9
1 machine-gun section	14	278	28	252	1	6	..	7	(a) Draught-horses and drivers supplied by the A.S.C. company.
1 company Army Services Corps	1	18	3	18	2	..	1	2	..	5	
1 bearer company	5	155	6	183	..	..	5	23	..	28
1 field hospital	3	64	3	1	1(a)	12(a)	..	13(a)	(a) Draught-horses and drivers supplied by the A.S.C. company.
	3	23	3	..	..	..	1(a)	2(a)	..	3(a)
	
Total with field force	139	2,787	348	2,405	4	6	27	91	16	144	
Total left at concentration place	39	

N.B.—The establishment here given is for the 2nd cavalry brigade. In the 1st brigade two regiments belong to the household cavalry on a smaller establishment. The mounted detachment, R.E., must be also deducted from the above table, likewise the headquarters detail of mounted infantry, and some consequent deductions to the brigade ammunition column and A.S.C. company. The establishment of the 1st brigade is 125 officers. Total all ranks, 2,280. In the 3rd and 4th brigades the mounted detachment, R.E., is deducted from above, also the headquarters detail of mounted infantry—the establishments thus become 131 officers. Total all ranks, 2,650. For further details of cavalry brigades see Field Army Establishments, Home Defence, 1892, Table XL, page 162.

HOME DEFENCE.

AN INFANTRY DIVISION ON WAR ESTABLISHMENT.

Composition.	Officers and Men.		Horses and Pack Animals.			Machine-guns (1-horse).	Guns (6-horse).	Carriages.			Total vehicles, guns included.	Remarks.
	Officers.	Total all ranks.	Officers.	Troop, pack, and draught.	Total all kinds.			Carts (2-horse).	Wagons, various (4-horse).	Wagons, various (6-horse).		
Staff of division	17	72	35	10	45	.. 4	..	54	90	..	148	The baggage and supplies, &c., of the divisional staff is carried in two G.S. wagons furnished by the divisional A.S.C. company. (a) Draught horses and drivers supplied by the A.S.C. company.
2 brigades of infantry ..	260	8,486	90	570	660	..	..	..	2	..	2
Divisional squadron of cavalry ..	6	139	18	121	139	..	..	..	12	21	51
3 batteries field artillery ..	18	516	21	375	396	..	18	..	3	25	38	
Divisional ammunition column ..	3	196	4	218	222	..	..	10	7	..	10
1 field company, R.E. ..	7	213	14	47	61	..	..	3	14	..	17
1 company Army Service Corps ..	6	115	7	104	111	..	..	3	4(a)	..	5(a)
1 field hospital	5	46	5	1	6	..	..	1(a)	..	..	..
Total with field force ..	322	9,783	194	1,446	1,640	4	18	71	182	46	271	
Total left at concentration places	..	94										

SERVICE ABROAD.—STAFF UNITS.

	Infantry Brigade.	Cavalry Brigade.	Infantry Division.	Cavalry Division.	Army Corps.	Remarks.
General Commanding	1a	1a	1d	1d	1	a. Major-Generals.
Aides-de-Camp	1	1	2	2	4	b. Has charge of all the horses in the brigade except A.S.C.
Deputy Adjutant-General ... ..	...	...	...	...	1	c. Staff Clerk.
Assistant Adjutant-Generals ... ..	...	...	1	1	3p	d. Lieutenant-General.
Deputy - Assistant Adjutant - Generals.	...	...	2e	2e	3p	e. { 1 for A duties.
Commandant, headquarters ... ..	...	...	...	...	1	f. { 1 " B "
Brigade-Major	1	1	...	...	...	g. Assistant Provost-Marsh.
Provost-Marshal ... ..	...	...	1f	1f	1	h. Adjutant, R.A.
Officer Commanding, R.A. ... ..	...	...	1	1n	1	i. Lieut.-Colonel, R.E.
Brigade-Major, R.A. ... ..	...	...	1g	1o	1	j. Adjutant, R.E.
Aide-de-Camp, R.A. ... ..	...	...	...	...	1	k. Surgeon-Colonel.
Chief Engineer ... ..	...	...	1k	...	1	l. A.C.G. of Ordnance.
Brigade-Major, R.E. ... ..	...	...	1i	...	1	m. One acts as Quarter-
Aide de Camp, R.E. ... ..	...	...	...	...	1	n. master-Sergeant when
Principal Chaplain ... ..	...	...	...	...	1	o. required.
Chaplains	1	1	2	1	1	p. Clerks for D.A.A.G. (B).
Principal Medical Officer ... ..	...	...	1j	1	1	q. O.C., R.H.A.
Surgeon-Majors ... ..	...	...	1	1	2	r. Adjutant, R.H.A.
Orderly Medical Officer ... ..	...	...	...	...	1	s. { 2 for A duties.
Deputy Commissary - General (Ordnance).	...	...	1k	1k	1	t. { 1 " B "
Principal Veterinary Officer ... ..	...	...	1	1	1	u. Has charge of all corps
Veterinary Officer	1b	...	...	...	1q	v. troops not otherwise
Total Officers...	5	4	17	14	29	w. provided for, viz., A.C.
Clerks in Adjutant - General's Office (A).	1c	1c	3l	2l	5*	x. Staff, corps battal.,
Clerk to Officer Commanding, R.A.	...	...	1	1	1	y. and Army Signallers.
Clerk to Chief Engineer ... ..	...	...	1	...	1	z. He also acts as Orderly
Clerks to Medical Department...	...	...	1	3	3	AA. Officer to P.V.O.
Clerks to Deputy Commissary- General (Ordnance).	...	...	3	1	2	
Clerk to Principal Veterinary Officer.	...	...	1	1	1	Staff baggage is allowed on
Compounder to Surgeon-Major ... ..	...	...	1	1	1	the following scale:—
Orderly to Principal Medical Officer.	...	...	...	...	1	
Orderly to Surgeon-Major ... ..	...	...	1	1	1	lbs.
Servants and Bâtmén	9	8	29	28	54	General 200
Total other ranks	10	9	41	38	70	Lieut.-General ... 150
						Major-General or
						Brigadier ... 100
						Staff Field Officers 80
						Other Officers in
						this Table ... 50
						Clerks or Inter-
						preters 20
						Servants 12
<i>Field Intelligence Department.</i>						
Assistant Adjutant-General ... ..	...	...	...	1	1	
Deputy - Assistant Adjutant General.	...	...	...	...	1	
Staff Captain ... ..	...	...	...	1	...	
Clerks, R.E. ... ..	...	...	...	1	2	
Military Mounted Police ... ..	...	...	...	3	5	
Servants and Bâtmén ... ..	...	...	...	4	4	
Interpreters (Civilians) ..	...	...	...	1	2	
<i>Attached.</i>						
Military Police (Officers) ... ..	...	...	...	...	1	
Mounted ... ..	...	5	10	10	11*	
Foot	10	...	...	...	11*	
Army Service Corps (Officers) ... ..	...	...	1	1	2	
Transport	4†	5	17	18	34	
Supply (Clerks) ... ..	...	...	5*m	5*m	4m	
Post Office Corps { Officers ... ..	...	...	...	...	2	
Men	4	2	4	2	7	
Interpreters (Civilians)	1	1	2	2	8	
Grand Total	30	21	74	77	154	
Horses	4	5	23	24	40	
	9	18	45	58	95	
	6	9	22	24	48	

* Including one Warrant Officer.

† Details shown in italics are provided Army Service Corps and are excluded from the staff totals.

SERVICE ABROAD.—INFANTRY.

	Battalion.	Detail left at base (a).	Company in the field.	Section with 2 machine-guns (g).	Signallers.		Mounted Infantry (g).			Remarks.
					Mounted company.	Dismounted company.	Battalion (8 companies).	Detail left at base (a).	Company in the field.	
OFFICERS AND MEN.										
Officers	29*	1†	3	1	1	2	48	...	5	(a) To be deducted from battalion establishment to obtain field strength. (b) If pack animals be used instead of wheel transport there will be 14 privates and 17 pack animals instead of the detail given here. For distribution see F.A.E. service abroad, 1892, table XXXI. (c) Horses and drivers are provided by A.S.C. (corps troops co). (d) 1 belongs to dismounted party. (e) 7 belong to dismounted party. (f) Of these 2 privates are trained as stretcher bearers. (g) Detail with machine - gun sections are in excess of field establishments of the battalions to which they are attached. For notes, mounted infantry machine - gun sections, see note (f), Infantry table home defence.
Warrant officers and sergeants	51	5†	5	1	2	2	58	2	6	
Drummers and buglers	16	...	2	...	...	...	16	...	2
Pioneers and artificers	13	...	...	...	...	...	40	...	5 (d)
Band	20	...	...	...	...	...	...	...	...
Corporals	41	...	5	2	29	30 {	48	8 {	6	
Privates	894	82†	98 (f)	5			802		97 (e)	
Privates as drivers ...	32	...	2	4	...	...	61	...	5
" wagonmen ...	...	...	1	...	...	...	28	...	2
Company storemen ...	...	8†	...	...	...	...	...	8	...
Total all ranks ...	1096	96	116	13	32	34	1,101	18	128	
HORSES AND PACK ANIMALS.										
Officers (private) ...	6‡	3	2	97‡	...	10	
Officers (public) ...	1	...	...	...	...	...	...	...	...
Riding	1	...	...	...	30	...	876	...	108
Draught... ..	58	...	4	6 (b)	...	...	120	...	10
Pack animals	8§	...	...	...	...	...	1	...	...
Total all kinds ...	69	...	4	6 (b)	33	2	1,094	...	128	
WAGONS, CARTS, &C.										
Wagons {	G.S. (4-horse) ...	11¶	23**	...	2	
	S.A. ammunition (4-horse) ...	...	...	...	...	...	6	...	1
Carts {	ammunition (2-horse) ...	4	...	1	1	...	...	...	...
	forage (2-horse) ...	...	...	...	1	4 (c)	4 (c)	...	...
	intrenching tool (2-horse) ...	1	...	...	...	...	...	...	...
Machine-guns (1-horse)		...	...	2	...	...	...	...	...
Total vehicles ...	16	...	1	4	4	4	29	...	3	

* 1 Lieut.-Colonel, 1 mounted Major, 3 di-mounted Majors, 5 Captains, 16 Subalterns, 1 Adjutant, 1 Quartermaster, with 1 Medical Officer attached. In mounted infantry 1 Lieut.-Colonel, 1 Major, 8 Captains, 32 Subalterns, 1 Adjutant, 1 Quartermaster, with Medical Officers and 3 Veterinary Officers attached.

† 1 Subaltern, 2 Serjeants, and 82 rank and file, are excess numbers to replace casualties. The company storemen form part of the cadre of the depot battalion.

‡ 2 for Lieut.-Colonel, 1 each for Major, Adjutant, Quartermaster, and Medical Officer.

§ 2 for ammunition, 1 for medical panniers.

¶ 3 each for Lieut.-Colonel and Major, 2 each for Captains, Subalterns, Adjutants, Medical and Veterinary Officers, 1 for Quartermaster.

¶ 2 for headquarters, 4 for companies, 2 for supply, and 3 for tents.

** 2 for headquarters, equipment, &c., 8 for companies, 8 for supply, 3 for tents, and 2 for pack-saddle forges.

SERVICE ABROAD.
CAVALRY.

	Regiment.	Detail left at base (a).	Squadron in the field.	Section with 2 machine-guns.	Remarks.
OFFICERS AND MEN.					
Officers	31*	..	6	1	(a) To be deducted from regimental establishments to obtain field strength. (b) Of these 19 are dismounted; and two privates of the mounted party are trained as stretcher bearers.
Warrant officers and sergeants	44	3	8	2	
Trumpeters	8	..	2	..	
Artificers	22	..	5	..	
Band	15	..	..	..
Corporals	32	..	8	..	
Privates	480	46†	108(b)	8	
Privates as drivers	35	..	7	7	
Total all ranks	667	49	144	18	
HORSES AND PACK ANIMALS.					
Officers (private)	88‡	..	18	3	
Troop	457	..	112	4	
Draught	68	..	14	14	
Pack animals	5	..	1	..	
Total all kinds	618	..	145	21	
WAGONS, CARTS, &c.					
Wagons { S.A. Ammunition (4-horse) ..	4	..	1	2	
forage (4-horse) ..	1	..	..	..
G.S. (4 horse) ..	9§	..	2	..	
Carts, forage (2-horse) ..	6||	..	1	1	
Machine-guns (2-horse) ..	..	..	..	2	
Total vehicles	20	..	4	5	

* 1 Lieut.-Colonel, 3 Majors, 6 Captains, 16 Subalterns, 1 Adjutant and 1 Quartermaster, with 1 Medical Officer, and 2 Veterinary Officers attached.
† 38 rank and file are excess numbers to replace casualties; the remainder, i.e., 1 armourer-sergeant, 1 sergeant master tailor, 1 orderly room clerk, and 8 squadron storemen form part of the cadre of the dépôt battalion.
‡ Quartermaster, 1; Medical and Veterinary Officers, 2 each; all other officers 3 each.
§ 1 for headquarters, 4 for squadrons, 4 for supply.
|| 2 headquarters (supply and tents), 4 for squadrons (tents).

SERVICE ABROAD.—ARTILLERY UNITS.

	Regimental staff of corps artillery.	12-pounder batteries.		Ammunition columns.			Regimental staff of ammunition park.	Ammunition park.			Remarks.
		R.H.A.	Field.	Infantry division.	Corps troops.	Cavalry division.		1st, 2nd, or 3rd sections.	4th section.	5th section.	
OFFICERS AND MEN.											
Officers	12¶	5*	5*	3†	3†	3†	5‡	3§	3§	3§	
Warrant officers and sergeants	3	9	9	10	10	10	1	2	8	8	
Trumpeters ... ..	...	2	2	2	2	2	...	2	2	2	
Artificers ... ..	...	9	8	11	11	11	...	7	7	7	
Corporals ... ..	...	6	6	6	6	6	...	4	3	3	
Bombardiers... ..	...	6	6	6	6	6	...	4	3	3	
Gunners	12	75†	77†	49	43	43	3	36	32	26	
Drivers	2	73	63	115	109	89	1	91	78	60	
Total all ranks... ..	29	185	176	202	190	170	10	156	136	112	
HORSES.											
Officers (private)	24	11	1	1	1	1	5	...	...	...
Officers (public) ... ..	...	...	6	3	3	3	1	3	3	3	
Riding ... ..	...	74	23	22	22	33	...	18	17	17	
Draught	4	116	110	206	194	152	2	164	136	100	
Total all kinds	28	201	139	232	220	189	8	185	156	120	
GUNS, WAGONS, AND CARTS.											
Guns (6-horse) ... ..	...	6	6	...	...	...	...	...	...	...
Ammunition wagons (6-horse) ... ..	...	6	6	6	10	12	...	...	...	...
Forge wagons (6-horse) ... ..	...	1	1	1	1	1	...	1	1	1	
Ammunition and store wagons (6-horse)	1b	2a	2b	21c	16c	4	...	25d	21d	15d	a 1 4-horse. b 1 4-horse. c 2 4-horse. d 3 4-horse.
Store wagons with limber (4-horse) ... ..	...	1	1	...	...	...	...	...	...	...
Artillery wagons (4-horse) ... ..	...	3	3	...	...	...	...	...	...	...
Spare gun carriages (4-horse) ... ..	...	...	...	1	4	1	...	...	...	...
S.A. ammunition carts (2-horse) ... ..	...	...	...	10	2	16	...	...	...	...
Forge carts (2-horse) ... ..	...	...	...	...	...	...	1	...	...	...
Total vehicles	1	19	19	39	33	33	1	26	22	16	

* 1 Major, 1 Captain, 3 Subalterns. [A Medical Officer and 2 Veterinary Officers are assigned to each horse or field artillery division whether these divisions are in the corps artillery of an army corps, or with an infantry or cavalry division.]
† 1 Major, 2 Subalterns.
‡ Includes 1 gunner left with depôt battalion as storeman.
§ 1 Captain, 2 Subalterns.
¶ 1 Lieut.-Colonel, 1 Adjutant, R.A., 1 Medical Officer and 2 Veterinary Officers.
¶ 1 Colonel Commanding corps artillery and Adjutant, 1 Lieut.-Colonel Commanding horse artillery and Adjutant, 1 Lieut.-Colonel Commanding field artillery and Adjutant, 2 Medical and 4 Veterinary Officers.

SERVICE ABROAD.—ENGINEER UNITS.

	Regimental staff of corps engineers.	Field company.	Mounted detachment.	Pontoon troop.	Telegraph battalion. (Headquarters and 4 sections.)	Balloon section.	Field park.	Remarks.
OFFICERS AND MEN.								
Officers	6	6*	4†	3‡	6§	3‡	1	(a) 4-horse.
Staff sergeants and { mounted ... ..	...	2	6	6	7	1	1	(b) The transport here
sergeants { dismounted	1	6	...	3	6	2	...	given is that with
Trumpeters ... ..	...	1	3	2	4	...	...	H.Q. and 4 air line
Buglers, dismounted ... ..	...	1	...	...	...	1	...	sections.
Artificers { mounted ... ..	...	1	1	3	6	...	2	The transport for H.Q.
{ dismounted ... ..	...	...	...	10	...	...	2	and 4 cable sections
Corporals { mounted... ..	...	3	7	8	9	2	3	is—8 G.S. wagons,
{ dismounted ... ..	...	15	1	12	13	6	...	R.E., for technical
Sappers { mounted	4	...	59	...	...	...	...	equipment; 6 G.S.
{ dismounted ... ..	...	133¶	12¶	57¶	87¶	16	5	wagons, R.E., for sup-
Drivers	1	44	26	96	110	23	31	ply; 8 cable wagons
Wagonmen ... ..	...	5	...	16	...	...	...	(6-horse).
Total all ranks	12	217	119	215	246	54	45	H.Q. and 4 sections
HORSES AND PACK ANIMALS.								
Officers (private)	8	12	8	6	12	6	2	may be composed of
Riding ... ..	...	5	82	14	31	3	3	H.Q., 1 cable section,
Draught	2	46	24	168	128	34	46	and 3 air line sections,
Pack animals ... ..	...	6**	6**	...	...	...	...	or other combination.
Total all kinds	10	69	120	188	171	43	51	
WAGONS AND CARTS.								
G.S. { for technical equipment	...	1(a)	...	2(a)	4(b)	6(a)	6(a)	
Wagons { (6-horse) .. ..	...	...	...	5	6(b)	...	...
{ for supply (4-horse) ... ..	...	...	...	1	...	...	1	
{ for forge (4-horse) ... ..	...	1	...	...	...	...	...
Pontoon and trestle wagons (6-horse) ... ..	...	2(a)	...	20	...	...	...
Telegraph { air line (6-horse) ... ..	...	...	...	...	12(b)	...	...
wagons { cable (6-horse) ... ..	...	...	...	...	...	...	...
Lithographic (or photographic) and printing wagons (4-horse) ... ..	...	...	...	...	...	...	2††	
S. A. ammunition wagons (4-horse) ... ..	...	...	3	...	...	...	...
Forage carts { for baggage, tents,	...	...	...	...	...	...	...
(2-horse) { &c.	1	5	6	...	...	3	3	
Carts, tool, double { for technical	...	4	...	...	...	...	...
B.E. (4-horse) { equipment	...	...	...	...	...	...	...
Total vehicles	1	13	9	28	22(b)	9	12	

* 1 Major, 1 Captain, and 4 Subalterns, with 1 Medical Officer attached if the company forms part of an infantry division, when the Veterinary-Lieut.-Colonel of the division will make the necessary arrangements for the veterinary charge of the company.

† 1 Major, 1 Captain, 2 Subalterns.

‡ 1 Captain, 2 Subalterns.

§ 1 Major, 1 Captain or Lieutenant, 4 Subalterns.

¶ 1 Lieut.-colonel, 1 Captain or Lieutenant, 2 Medical, and 2 Veterinary Officers for duty with the corps engineers.

¶ Includes 1 storeman left with dépôt battalion.

** 5 for pack transport, 1 for medical panniers.

†† If required, both a lithographic and photographic wagon may be taken, men and horses to be added accordingly, including 3 lithographers for a lithographic wagon.

SERVICE ABROAD.—ARMY SERVICE CORPS UNITS.

	Company with Infantry				Company with Cavalry				Company for medical services of two cavalry brigades.				Company with Infantry				Company with Cavalry				Remarks.				
	1st Brigade.				2nd Brigade.				1st Brigade.				2nd Brigade.				1st Brigade.					2nd Brigade.			
	T.	S.	T.	S.	Bearer com-pany.	Field hospital.	Supply column.	Headquarters of Co. and spare.	Bearer com-pany.	Field hospital.	Supply column.	T.	S.	T.	S.	Company with cavalry division.	Company with army corps headquarters and corps troops.	One company organized as a field bakery.							
OFFICERS AND MEN.																			* A brigade of cavalry, when two army corps are in the field, will consist of four cavalry regiments, in which case it will be necessary to add 18 drivers, 9 general service wagons, and 36 draught horses to the supply column.						
Officers ..	3†	3	3†	3	1	..	..	1	1	..	..	3†	3	4‡	3	T.	S.	..			
Warrant officers and sergeants ..	10	3	9	4	1	2	..	4	1	2	..	10	6	12	7	11	8								
Artificers ..	22	..	18	..	3	3	..	..	3	3	..	12	..	14	..	12	..						
Trumpeters ..	2	..	1	..	1	..	..	..	1	..	..	1	..	1	..	2	..			
Corporals ..	8	3	7	3	2	2	1	1	2	2	1	7	3	10	5	7	18								
Privates and drivers ..	134	10	108	13	34	21	4	25	34	21	4	108	9	195	15	156	96								
Total all ranks ..	179	18	141	■	42	28	5	31	42	28	5	141	21	236	30	191	119								
HORSES.																									
Officers (private) **	2	4	3	3	..	..	..	..	..	..	..	4	5	5	5	1	2	
" (public)	3	3	3	3	1	3	1	5	4	3	1	3	3	3	3	2	2								
Riding ..	17	1	14	1	5	3	8	24	58	36	8	14	2	17	2	23	..								
Draught ..	210	..	160	..	58	36	8	24	58	36	8	156	..	214	..	224	..								
Total all kinds ..	293		182		64	39	9	30	68	39	9	179		238		345	263								
WAGONS AND CARTS.																									
Carts { forage (2-horse)	3	1	1	3	..	..	..	1	..	..	..	2	2	3	2	3	..	6	
water (2-horse)	1	..	1	..	..	..	..	..	..	..	..	1	..	1	..	..	49	
Wagons { G S. (4-horse)	6	16	5	28	1	1	2	1	1	1	3	6	16	80	14	47	1								
forage (4-horse)	1	..	1	..	..	..	..	1	..	..	..	1	..	1	..	..	56	
Total vehicles ..	11	10	8	31	1	1	2	3	1	1	3	12	18	33	19	47	56								

SERVICE ABROAD.

MEDICAL UNITS.

	Bearer company.	Field hospital.	Transport attached from Army Service Corps company.		
				Bearer company.	Field hospital.
<hr/>					
OFFICERS AND MEN.			OFFICERS AND MEN.		
Medical officers	3*	4†	Officers	1	..
Quartermaster .. ..	..	1	Warrant officers and ser- geants	1	2
Warrant officers and ser- geants	7	9	Artificers	2	1
Buglers	1	..	Trumpeter	1	..
Corporals	6	4	Corporals	2	2
Privates	15	14	Privates	5	3
Privates as bearers	32	..	Drivers	29	18
Privates as ward orderlies ..	..	14			
Total all ranks ..	64	46	Total all ranks ..	41	26
<hr/>					
HORSES.			HORSES.		
Officers (private)	3	5	Officers (public) .. ..	..	..
Riding	1	1	Riding	5	3
Draught .. ..	..	..	Draught	58	36
Total all kinds ..	4	6	Total all kinds ..	63	39
<hr/>					
WAGONS, CARTS, &c.			WAGONS.		
Wagons, G.S. (4-horse) { for equipment ..	1	2	Wagons, G.S. (4-horse)	1	1
{ „ medical stores ..	1	..			
{ „ medical and surgical equipment }	..	4			
Ambulances (4-horse) ..	10	..			
Carts { forage (2-horse) ..	2	2			
{ water (2-horse) ..	1	2			
Total vehicles ..	15	10	Total vehicles ..	1	1

* 1 Surgeon-Major, 2 Surgeon-Captains or Surgeon-Lieutenants.

† 1 Surgeon-Lieut.-Colonel, 1 Surgeon-Major, 2 Surg.-Captains or Surg.-Lieuts.

SERVICE ABROAD.—A CAVALRY BRIGADE ON WAR ESTABLISHMENT.

Composition.	Officers and Men.		Horses and Pack Animals.			Machine-guns (2-horse).	Carriages.			Total vehicles, guns included.	Remarks.
	Officers.	Total all ranks.	Officers.	Troop, pack, and draught.	Total all kinds.		Carts (2-horse).	Wagons, various (4-horse).	Wagons, various (6-horse).		
Staff	4	21	12	6	18	..	..	..	..	..	The eight tents and baggage of the brigade staff are carried in two (1 H wagons furnished by the A.M.C. company.
3 regiments*	93	1,853	264	1,589	1,853	..	18	42	..	(K)	
1 machine-gun section ..	1	18	3	18	21	2	1	2	..	5	
1 company Army Service Corps†	6	164	7	175	182	..	5	34	..	30	
† company for medical services (1st brigade) ..	2	106	2	140	142	..	1	6	..	7	
1 bearer company ..	3	64	3	1	4	..	3 (a)	12 (a)	..	15 (a)	(a) Draught horses and drivers supplied by the A.B.C. company.
1 field hospital ..	5	46	5	1	6	..	4 (a)	6 (a)	..	10 (a)	
Total with field force (1st brigade)	114	2,272	296	1,930	2,226	2	32	102	..	136	
Total with field force (2nd brigade)	113	2,242	295	1,901	2,196	2	31	100	..	133	
Remaining at base (1st brigade)	..	146									
" " (2nd ")	..	147									

* When two army corps are in the field there will be four regiments in each cavalry brigade.

† In a brigade of four regiments this unit has an increased establishment, see A.S.C. tables.

A CAVALRY DIVISION ON WAR ESTABLISHMENT.

[illegible]

SERVICE ABROAD.
AN ARMY CORPS ON WAR ESTABLISHMENT.

Composition.	Officers and Men.		Horses and Pack Animals.			Machine-guns (1-horse).	Guns (6-horse).	Carriages.			Total vehicles, guns included.	Remarks.
	Officers.	Total all Ranks.	Officers.	Troop, pack and draught.	Total all kinds.			Carts, 2-horse.	Wagons, various (4-horse).	Wagons, various (6-horse).		
Staff	34	154	77	18	95	12	54	279	711	141	1,197	The baggage and supplies, &c., of the A. C. staff are carried in 9 G.S. wagons and 2 forage carts furnished by the Army Service Corps (corps troops company).
3 divisions of infantry	972	30,219	609	5,886	6,495	...	...	3	5	...	8
Corps cavalry (headquarters and 1 squadron)	13	186	34	149	183	...	...	...	1	...	1
regimental staffs	6	23	15	4	19	...	...	...	15	24	57
3 horse artillery batteries	18	555	39	570	609	...	18	...	18	14	38	
2 field batteries	12	352	14	266	280	...	12	...	6	25	33	
corps troops ammunition column	4	191	5	216	221	...	...	2	...	...	1
staff of ammunition park	5	10	6	2	8	...	...	1	12	...	100
ammunition park, sections 1 to 4 ¹	12	604	12	699	711	...	...	...	...	88	1
regimental staffs	2	8	4	2	6	...	...	...	...	...	13
field company	7	217	13	57	70	6	28	(a) Draught horses and drivers supplied by the Army Service Corps (corps troops company).
pontoon troop	5	216	8	182	190	...	...	...	8	20	...
headquarters and half telegraph battalion	7	246	13	159	172	...	...	...	6	16	22
field park	1	46	2	49	51	...	...	3	9	...	12
balloon section	3	54	6	37	43	...	...	3	6	...	9
1 battalion	28	1,000	7	62	69	...	...	5	11	...	16
1 machine-gun section	1	13	...	6	6	2	...	2	...	...	4
Army signallers—2 companies ²	3	66	5	30	35	...	...	8	...	...	8
1 company for corps troops	7	246	8	237	245	...	...	4	62	...	66
A.S.C. { 2 bakery companies	10	620	10	494	504	...	...	12	100	...	112
1 field hospital	5	46	5	1	6	...	...	4 (a)	6 (a)	...	10 (a)
Total with field force	1,155	35,091	892	9,226	10,118	14	84	332	978	328	1,736	
Remaining at base	25	2,369	...	...	...	...	...	...	...	...	...

¹ The 5th section ammunition park which works in conjunction with the cavalry divisional ammunition column is included in the detail of the cavalry division. In normal circumstances, however, it would be with the staff and the other 4 sections in rear of the army corps when its numbers would have to be deducted from the totals of a cavalry division and added to these here given.

² The 2 medical and 4 veterinary officers who belong to this staff are shown as attached to the units of corps troops.

³ One mounted, and one dismounted company.

SERVICE ABROAD.—STAFF UNITS.

	Infantry Brigade.	Cavalry Brigade.	Infantry Division.	Cavalry Division.	Army Corps.	Remarks.
General Commanding	1a	1a	1d	1d	1	a. Major-Generals.
Aides-de-Camp	1	1	2	2	4	b. Has charge of all the horses in the brigade except A.S.C.
Deputy Adjutant-General ... ..	...	...	...	...	1	c. Staff Clerk.
Assistant Adjutant-Generals ... ..	...	...	1	1	3p	d. Lieutenant-General.
Deputy - Assistant Adjutant-Generals.	...	...	2e	2e	2p	e. { 1 for A duties.
Commandant, headquarters ... ..	...	...	...	...	1	f. { 1 " B "
Brigade-Major	1	1	...	...	...	g. Assistant Provost-Marshal.
Provost-Marshal ... ..	...	...	1f	1f	1	h. Adjutant, R.A.
Officer Commanding, R.A. ... ..	...	...	1	1n	1	i. Lieut.-Colonel, R.E.
Brigade-Major, R.A. ... ..	...	...	1g	1o	1	j. Adjutant, R.E.
Aide-de-Camp, R.A. ... ..	...	...	...	...	1	k. Surgeon-Colonel.
Chief Engineer ... ..	...	...	1h	...	1	l. A.C.G. of Ordnance.
Brigade-Major, R.E. ... ..	...	...	1i	...	1	m. One acts as Quarter-master-Sergeant when required.
Aide de Camp, R.E. ... ..	...	...	...	...	1	n. Clerks for D.A.A.G. (B).
Principal Chaplain ... ..	...	...	...	...	1	o. O.C., R.H.A.
Chaplains	1	1	2	1	1	p. Adjutant, R.H.A.
Principal Medical Officer ... ..	...	...	1j	1	1	q. { 2 for A duties.
Surgeon-Majors ... ..	...	...	1	1	2	r. { 1 " B "
Orderly Medical Officer ... ..	...	...	...	...	1	s. Has charge of all corps troops not otherwise provided for, viz., A.C. Staff, corps battalion, and Army Signallers. He also acts as Orderly Officer to P.V.O.
Deputy Commissary - General (Ordnance).	...	...	1k	1k	1	
Principal Veterinary Officer ... ..	...	...	1	1	1	
Veterinary Officer	1b	...	...	...	1q	
Total Officers...	5	4	17	14	29	
Clerks in Adjutant - General's Office (A).	1c	1c	3l	2l	6*	
Clerk to Officer Commanding, R.A.	...	...	1	1	1	
Clerk to Chief Engineer ... ..	...	...	1	...	1	
Clerks to Medical Department...	...	...	1	3	3	
Clerks to Deputy Commissary-General (Ordnance).	...	...	3	1	2	
Clerk to Principal Veterinary Officer.	...	...	1	1	1	
Compounder to Surgeon-Major	...	...	1	1	1	
Orderly to Principal Medical Officer.	...	...	...	...	1	
Orderly to Surgeon-Major ... ..	...	...	1	1	1	
Servants and Bâtmén	9	8	29	28	54	
Total other ranks	10	9	41	38	70	
<i>Field Intelligence Department.</i>						
Assistant Adjutant-General ... ..	...	...	...	1	1	
Deputy - Assistant Adjutant General.	...	...	...	...	1	
Staff Captain ... ..	...	...	...	1	...	
Clerks, R.E. ... ..	...	...	...	1	2	
Military Mounted Police ... ..	...	...	...	3	5	
Servants and Bâtmén ... ..	...	...	...	4	4	
Interpreters (Civilians) ..	...	...	...	1	2	
<i>Attached.</i>						
Military Police (Officers) ... ..	...	...	...	...	1	
Mounted ... ..	...	5	10	10	11*	
Foot	10	...	...	...	11*	
Army Service Corps (Officers) ... ..	...	...	1	1	2	
Transport	4†	5	17	18	34	
Supply (Clerks) ... ..	...	...	5*m	5*m	4m	
Post Office Corps { Officers ... ..	...	...	...	...	2	
Men	4	2	4	2	7	
Interpreters (Civilians)	1	1	2	2	8	
Grand Total	30	21	74	77	154	
Horses	4	5	23	24	40	
	9	18	45	58	95	
	6	9	22	24	48	

* Including one Warrant Officer.
by Army Service Corps and are excluded from the staff totals.

† Details shown in italics are provided

SERVICE ABROAD.—INFANTRY.

	Battalion.	Detail left at base (a).	Company in the field.	Section with 2 machine-guns (g).	Signallers.		Mounted infantry (g).			Remarks.
					Mounted company.	Dismounted company.	Battalion (8 companies).	Detail left at base (a).	Company in the field.	
OFFICERS AND MEN.										
Officers	29*	1†	3	1	1	2	48	...	5	(a) To be deducted from battalion establishment to obtain field strength. (b) If pack animals be used instead of wheel transport there will be 14 privates and 17 pack animals instead of the detail given here. For distribution see F.A.E. service abroad, 1892, table XXXI. (c) Horses and drivers are provided by A.S.C. (corps troops co). (d) 1 belongs to dismounted party. (e) 7 belong to dismounted party. (f) Of these 2 privates are trained as stretcher bearers. (g) Detail with machine - gun sections are in excess of field establishments of the battalions to which they are attached. For notes, mounted infantry machine - gun sections, see note (f), Infantry table home defence.
Warrant officers and sergeants	51	6†	5	1	2	2	58	2	6	
Drummers and buglers	16	...	2	...	...	...	16	...	2
Pioneers and artificers	13	...	...	...	...	...	40	...	5 (d)
Band	20	...	...	...	...	...	...	...	...
Corporals	41	...	5	2	29	30 {	48	8 {	6	
Privates	894	82†	98 (f)	5			802		97 (e)	
Privates as drivers	32	...	2	4	...	...	61	...	5
" wagonmen	...	...	1	...	...	...	28	...	2
Company storemen	...	8†	...	...	...	...	...	8	...
Total all ranks ...	1096	96	116	13	32	34	1,101	18	128	
HORSES AND PACK ANIMALS.										
Officers (private) ...	6‡	3	2	97,§	...	10	
Officers (public) ...	1	...	...	...	...	...	...	...	...
Riding	1	...	...	...	30	...	876	...	108
Draught... ..	58	...	4	6 (b)	...	...	120	...	10
Pack animals	3§	...	...	...	...	...	1	...	...
Total all kinds ...	69	...	4	6 (b)	33	2	1,094	...	128	
WAGONS, CARTS, &C.										
Wagons {	G.S. (4-horse) ...	11¶	23**	...	2	
	S.A. ammunition (4-horse) ...	...	...	...	...	...	6	...	1
Carts {	ammunition (2-horse) ...	4	...	1	1	...	...	...	...
	forage (2-horse) ...	...	...	...	1	4 (c)	4 (c)	...	...
	intrenching tool (2-horse)	1	...	...	...	...	...	...	...
Machine-guns (1-horse)		...	...	2	...	...	...	...	...
Total vehicles ...	16	...	1	4	4	4	29	...	3	

* 1 Lieut.-Colonel, 1 mounted Major, 3 di-mounted Majors, 5 Captains, 16 Subalterns, 1 Adjutant, 1 Quartermaster, with 1 Medical Officer attached. In mounted infantry 1 Lieut.-Colonel, 1 Major, 8 Captains, 32 Subalterns, 1 Adjutant, 1 Quartermaster, with Medical Officers and 3 Veterinary Officers attached.

† 1 Subaltern, 2 Serjeants, and 82 rank and file, are excess numbers to replace casualties. The company storemen form part of the cadre of the depot battalion.

‡ 2 for Lieut.-Colonel, 1 each for Major, Adjutant, Quartermaster, and Medical Officer.

§ 2 for ammunition, 1 for medical panniers.

¶ 3 each for Lieut.-Colonel and Major, 2 each for Captains, Subalterns, Adjutants, Medical and Veterinary Officers, 1 for Quartermaster.

¶ 2 for headquarters, 4 for companies, 2 for supply, and 3 for tents.

** 2 for headquarters, equipment, &c., 8 for companies, 8 for supply, 3 for tents, and 2 for pack-saddle forges.

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THE BRITISH EMPIRE" MAP N° 2

INSTITUTIONS, EMPLOYMENT AGENCIES, HOMES, ASSOCIATIONS, SCHOOLS, AND FUNDS

IN CONNECTION WITH

THE ARMY AND THE NAVY.¹

N.B.—*Those marked * are known to be in need of, or to welcome, pecuniary support from the General Public.*

SCIENTIFIC INSTITUTIONS.

Titles.	Addresses.
*Royal United Service Institution. (Established in 1831 for promotion of Naval and Military Art. Additional members and contributions to Building Fund needed.) Aldershot Military Society. Military Society of Ireland. United Service Institution of India. Royal Artillery Institution.	Whitehall, S.W. Aldershot. Dublin. Simla, East Indies. Woolwich.

EMPLOYMENT AGENCIES.

N.B.—About 18,000 men are passed annually to the Reserve at about 26 years of age. Many other soldiers are discharged annually to Pension. It is to facilitate their re-entry into civil life that the following agencies have been formed.

*National Association for the Employment of Reserve and Discharged Soldiers 1885.	12, Buckingham Street, Strand, W.C.
N.B.— <i>No Fees.</i>	

¹ These extracts are mainly taken, with the kind permission of the author, from "Naval and Military Funds and Institutions," by Colonel James Gildea. (Eyre and Spottiswoode, 1893. Price 1s. 6d.)

*The Branch Offices are—

Birmingham, Brighton, Brentwood (Essex), Cambridge, Canterbury, Chester, Derby, Dundee, Glasgow, Gosport, Gravesend, Halifax, Hull, Liverpool, Manchester, Newcastle, Norwich, Nottingham, Plymouth, Portsmouth, Sheffield, Taunton, Worcester.

Affiliated to the National Association are :—

Titles.	Addresses.
*Regimental District Associations.	<i>The Barracks at each Regimental District Headquarters, see "Army List."</i>
The Scottish Society.	51, Hanover Street, Edinburgh.
The London Recruiting District Agency.	St. George's Barracks, London, S.W.
The Brigade of Guards' Agency.	Brigade Office, Whitehall, S.W.
The Riflemen's Aid Society.	Winchester.
The Employment Registry.	Discharge Depot, Gosport, Hants.

N.B.—*Employers may engage trustworthy men at any of the above. None but such as bear good characters are recommended.*

The following agencies work independently of the National Association referred to :—

*Army and Navy Pensioners' Employment Society. 1855.	20, Charing Cross, S.W.
(For Naval and Military Pensioners.)	
*Army and Navy Labour Corps of House and Window Cleaners.	62, Whitcombe Street, W.C.
(Connected with above.)	
*Corps of Commissionaires. 1859.	Exchange Court, Strand, W.C.
(Enrols discharged soldiers and sailors.)	
Maintains out-quarter divisions at Belfast, Birmingham, Edinburgh, Glasgow, Leeds, Liverpool, Manchester, and Nottingham.	
Vale of Leven Union Jack Brigade 1887.	Alexandria, Dumbartonshire.

GOVERNMENT EMPLOYMENT.

As Office Keepers, Messengers, Porters, &c., subject to examination in "the three R's." Age, generally, 21 to 35; but in most cases candidates who have served in the Army or Navy may deduct from actual age any time served towards Pension.

Enquiry and Application should be made to the *Chief Clerk* at Board of Admiralty; Board of Agriculture; Charity Commission; Colonial Office; House of Commons; Custom House; Ecclesiastical Commissioners; Education Department; Exchequer and Audit; Foreign Office; General Post Office; Home Office; India Office; Inland Revenue Department; Local Government Board; House of Lords; Privy Council Office; Royal Mint; Science Department, South Kensington; Royal Courts of Justice,

W.C.; Board of Trade; Treasury, Whitehall; War Office; Office of Woods; Office of Works; The Royal Parks (Col. Wheatley, 12, Whitehall Place); Army Clothing Department, Pimlico; and the Civil and Military Prisons Department, Home Office, S.W.

(Discharged soldiers and sailors, and their widows, are eligible under precise rules.)

N.B.—*The addresses can be obtained from any Directory.*

SOLDIERS' HOMES, &c.

Those here mentioned are chiefly organizations maintaining Homes at many places. The arrangement is in the chronological order.

Titles.	Addresses.
*Soldiers' and Sailors' Homes. Established 1859 by the Wesleyan Methodist Church.	Centenary Hall, Bishopsgate, E.C.
At Aldershot, Chatham, Portsmouth, Woolwich, Shorncliffe, London (Buckingham Palace Road), The Curragh, Devonport, Malta (two), India (five), The Cape (Simon's Town), Cairo, Trincomali.	
*Mrs. and Miss Daniell's Homes. Established 1862.	Mission Hall, Aldershot.
Branches at Colchester, Plymouth, Manchester, Chatham, London (James Street, Buckingham Gate), Windsor.	
*Miss Weston's Sailors' Rests. 1868.	Devonport and Portsmouth.
*Miss Robinson's Homes. 1874.	Soldiers' Institute, Portsmouth.
Branches—High Street, Portsmouth, and Queen Street, Portsea; Alexandria (Egypt).	
Gibraltar Soldiers' Institute. 1876.	Southport Street, Gibraltar.
*Gibraltar Soldiers' and Sailors' Home. 1882.	Europa Main Road, Gibraltar.
*Miss Sandes' Homes. 1879. (Ireland.)	Soldiers' Home, Dublin.
Branches at Soldiers' Institute (Phoenix Park Gates), Cork, Ballincollig, Queenstown, Belfast, Dundalk, Athlone.	
Edinburgh Soldiers' and Sailors' Home. 1877.	Mound Place, Edinburgh.
(Sleeping accommodation, 35 beds.)	
*Church of England Soldiers' Institutes. 1880.	Church House, Westminster, S.W.
Institutes at Aldershot, Colchester, Gosport, Woolwich, Malta, Pirbright.	

Homes under private or local management exist also at

Devonport, Duke Street (Royal Sailors'); Sandgate, Chapel Street; Cork, Merchant's Quay (Royal Sailors'); *Norwich; *Woolwich, High Street; Glasgow, Maryhill; Brighton, Lewes Road; Dover, Margate Street; Ipswich; Ayr, N.B.; The Curragh Camp; Portland; *Gosport, Avenue Road (Miss Ridout's);

Carlisle; Kensington, Church Street (a "free-and-easy" Club); *Dorchester: *York; Winchester, *Hyde Close, ditto, High Street; Clonmel; *Hamilton, N.B.; Canterbury; Newcastle-on-Tyne, 25, Ancrum Street; Fermoy; *Lichfield, Whittington; Birr; North London, Norfolk Road, N.W.; Pembroke Dock (Army and Navy); *Caterham; Dublin, Castle Street (Soldiers' Club non-sectarian).

VARIOUS ASSOCIATIONS.

(A few only can be mentioned.)

Titles.	Addresses.
*Army. 1850. } Scripture Readers' *Royal Naval. 1860. } Society.	4, Trafalgar Square, W.C.
Army Temperance Association. 1862. Branch at Aldershot.	Simla, Bengal.
National Society for Aid to Sick and Wounded. 1870. (Irrespective of Nationality.)	Duke Street, Adelphi, W.C.
Princess of Wales Branch of ditto. 1885. (For British Troops.)	
Army Guild of the Holy Standard. 1893. (For Church of England Work in all Garrisons.)	Sanctuary, Westminster, S.W.
Army and Navy Veterans' Association. 1891. Originally for the Army, but now includes the Navy. Chatham Circle.—Ditto, Woolwich Circle.—Patron-in-Chief—H.R.H. the Duke of Cambridge. The object of the Veterans' Association is to maintain the tie between old comrades, officers and men, and elevate the status of the retired soldier.	General Forbes, Chairman. Lieut.-Colonel J. Bramley Ridout, Executive Officer, New Brompton, Kent. Lieut.-Colonel Browell, R.A., Chairman. There are two pre-existing Veterans' Associations in Canada—at Toronto and Halifax.
N.B.— <i>Retired Officers invited to contribute as Honorary Members; or in promoting the formation of other circles.</i>	

ASYLUMS, SCHOOLS, &c.

Royal Chelsea Hospital. 1682.	Chelsea.
Royal Kilmainham Hospital. 1684.	Dublin.
Royal Greenwich Hospital. 1694.	Spring Gardens, S.W.
Royal Hibernian Military School. 1765.	Dublin.
Duke of York's Military School. 1803.	Chelsea.
Royal Caledonian Asylum. 1815. (For Children of Scottish Soldiers, Sailors, and Marines.)	Holloway, N.

ADVERTISEMENTS.

v

Titles.	Addresses.
*Sailors' Orphan Girl's School. 1829. Royal Naval School (Eltham). 1883. (Sons of Officers, Royal Navy and Marines.)	50, Bishopsgate Street Within, E.C. Sackville Street, W.
Royal School for Naval and Marine Officers' Daughters. 1840. Wellington College. 1853. (Foundation for 90 sons of Officers.)	Sackville Street, W. Treasury, Whitehall, S.W.
*Royal Cambridge Asylum for Soldiers' Widows. 1854.	Cockspur Street, S.W.
*Soldiers' Daughters' Home (Hampstead). 1855.	Adelphi, W.C.
Royal Victoria Patriotic Asylum. 1857. (Orphan daughters of Soldiers, Sailors, and Marines.)	53, Charing Cross, S.W.
*Royal School for daughters of Officers of the Army. 1864. (Bath.) Drummond Institution. 1864. (For orphan daughters of Soldiers.)	25, Cockspur Street, S.W. Dame Street, Dublin.
*Gordon Boys' Home. 1885. (Woking.)	20, Cockspur Street, S.W.

FUNDS.

Royal Artillery Regimental Charities. 1843. (For temporary assistance of Soldiers' families. R.A.)	Woolwich.
Royal Commission of the Patriotic Fund. 1854. (Administers various relief funds under specified conditions.)	53, Charing Cross, S.W.
Shadforth Annuities. 1856. (For widows and unmarried daughters of Officers, Army, Navy, and Marines.)	War Office, S.W.
Royal Engineers' Charitable Fund. 1869. (Assists families of non-commissioned officers and men. R.E.)	Deputy Adjutant-General, Royal En- gineers, War Office, S.W.
*Royal Military Benevolent Fund. 1875. (Annuities to widows and unmarried daughters of Officers of the Army, including Royal Marines.)	193, Queen's Gate, S.W.
Indian Patriotic Fund. 1880. (Relieves widows and orphans of British and Native Soldiers, in- cluding Camp Followers, disabled in the field.)	Colonel James Gildes, 7, Knaresborough Place, S.W.

Titles.	Addresses.
<p>*Royal Cambridge Fund. 1882. (Relieves wounded, disabled, or decayed Soldiers of good character.) Royal Naval Fund. (Naval Exhibition, 1891.) (Relieves widows or dependent relatives of Seamen and Marines dying in the Service.)</p>	<p>Walter Sheean, Esq., War Office, S.W. 9, Craig's Court, S.W.</p>
<p>Government Compassionate { Navy. Funds { Army.</p>	<p>Admiralty, Whitehall, S.W. War Office, Pall Mall, S.W.</p>
<p>N.B.—Both make Grants, from sums provided in Estimates, to near relatives of Officers deceased (Navy), or not entitled to Pensions (Army).</p>	

St. John Ambulance Association, being
the Ambulance Department of the
Grand Priory of the Order of the
Hospital of St. John of Jerusalem in
England.

President: H.R.H. Prince of Wales,
K.G. (Grand Prior of the Order).

Director of the Ambulance Department,
and Chairman of Committees—The
Right Hon. Lord Sandhurst (Under
Secretary of State for War).

St. John's Gate, Clerkenwell, London,
E.C.

Centres established in all principal towns of the United Kingdom, and in many of
the Colonies. Classes to teach "*first aid to the sick and wounded*" constantly held on
board Her Majesty's ships, and in all military garrisons. Full particulars to be
obtained from the Chief Secretary.

*The Soldiers' and Sailors' Families As-
sociation. 1885.

Colonel James Gildes, 7, Knaresborough
Place, Kensington, S.W.

Relieves, in peace and war, the families of men of all branches of the Land and
Sea Forces of the United Kingdom.

An "Officers' Branch" aids, temporarily, Officers' widows, and assists the education
of Officers' children; and a "Nursing Branch" supplies nurses for families of Soldiers
and Sailors in large garrison and seaport towns, and instruction as to health and
hygiene.

The organization is wide-embracing. There are formed, in England and Scotland,
County and Divisional Committees, representing "Petty Sessional" or "Union"
divisions of counties, with lady Presidents. In Ireland the Committees work by
counties, in India by Presidencies. The work is entirely voluntary, and it is believed
"the standard of morality and self-respect will be raised, and a closer intimacy and
interest formed between Territorial Regiments and the inhabitants of the several
districts."

A BRIEF DESCRIPTION

OF THE

Royal United Service Institution.

Adapted from that issued under the Authority of the Council, 1893.

THIS Institution was founded in 1831, under the auspices of King William the Fourth and under the patronage of the Duke of Wellington, and of some of the most distinguished Naval and Military Officers, at that time, in the service of the Country.

In 1860, Her Majesty the Queen was graciously pleased to grant to the Members of the Institution a Royal Charter of Incorporation, under the title of THE ROYAL UNITED SERVICE INSTITUTION.

On the 1st January, 1891, Her Majesty was further graciously pleased to grant to the Institution the use of the Banqueting House, Whitehall, for the purposes of their Museum, &c., "as a mark of Her Majesty's appreciation of the usefulness of the Institution in connection with the Naval and Military Services." The Council hopes that by the addition of a building on the adjoining ground, the Institution will ere long be in possession of a House* which shall enable it fully to carry out the objects for which the Institution was founded, and also be worthy of the Services which it represents.

DESIGN.

The design of the Institution is to promote Naval and Military Art, Science and Literature.

The above object is carried out by means of a Library; the delivery of Lectures; the exhibition of Inventions; the publication of a Journal; a Museum containing Naval

* The building is now in course of erection, and the Council hopes that it will be in possession of the Members by June, 1894.

and Military Models, a collection of Arms of all Nations, Relics of, and Trophies connected with, distinguished Officers and warlike operations; and other exhibits affording professional information.

QUALIFICATION OF MEMBERS.

The following Officers are *entitled* to become Members *without ballot*, on payment of their entrance fee and subscription, viz., . . . Officers of the Army, Navy, Marines, Her Majesty's East Indian and Colonial Naval and Military Forces, Militia, Yeomanry, Royal Naval Reserve, and Volunteer Corps, and Naval and Military Cadets on the recommendation of their commanding officers.

Officers who have quitted the Service, and some others, are *eligible* to become Members by ballot.

SUBSCRIPTION.

AN ENTRANCE FEE OF ONE POUND.

An Annual Subscription of ONE POUND, or a Life Subscription of TEN POUNDS (including Entrance Fee).

THE JOURNAL.

The Journal, published Monthly, under the authority of the Council, contains reports of the Lectures, and also original Papers. In addition, there are—a "Foreign section," for translations from Foreign publications—Notes—naval and military—on current events at home and abroad, and—Notices of the contents of Foreign Periodicals and New Books.

The Council is anxious that Officers (particularly those on Foreign Stations) should contribute Papers, descriptive of Countries or Warlike operations, or containing other Professional information.

THE LIBRARY.

The Library contains 24,099 volumes of Professional, Historical and Scientific Works.

The Library is found most valuable for purposes of study and reference, and is extensively used by the Officers of H.M.'s Services.

Members in the United Kingdom, who are not in arrears with their subscription to the Institution, can borrow books from the Library on payment of 10s. in advance for a period of twelve months, such period being reckoned from date of payment. Each

book lent can be kept for one month, but this term can be extended under certain conditions.

With the exception of works of reference, rare and valuable books, which cannot be replaced with certainty, bound volumes of pamphlets, and certain other works, which are not allowed to be taken out of the Institution, the whole of the books in the General Library are available for the use of members of the Lending Library.

Detailed Rules as to the routine of the Lending Library can be obtained on application to the Librarian.

READING AND WRITING ROOMS.

In addition to the Library, there is a Reading Room, in which the leading Daily Papers, the Quarterly and Monthly Periodicals, and the Weekly Scientific and Professional Newspapers are to be found; also a Writing and Smoking Room. Tea and Coffee can be obtained by Members.

These Rooms are open to Members from 10 A.M. to 8 P.M.

Members can receive and answer letters at the Institution.

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Soldiers, Sailors, Militiamen, Volunteers, and Policemen in uniform have free admission to the Museum. The public may obtain admission to the Museum by tickets, to be obtained of Members and of the Secretary.

The Royal United Service Institution, under the Patronage of Her Majesty, aided by the Government and supported by the different branches of Her Majesty's Services has become a National Institution, and as such seeks not only to cultivate the Sciences connected with the Profession of Arms, but also to concentrate in the Capital of the Empire whatever may tend to illustrate the Services of the Army and Navy of the Country.

GERALD R. MALTBY, Lieut. R.N.,
Secretary.

WHITEHALL YARD,
April, 1893.

Telegraphic Address, o/o "Russatus," London.

Royal United Service Institution

AN APPEAL

Her Majesty the Queen has graciously assigned to the use of the Royal United Service Institution the Banqueting House, Whitehall, but this building being of itself insufficient for the purposes of the Institution, it has been decided to erect further accommodation on an adjoining site, of which a lease has been obtained from the Crown. There is therefore an immediate prospect of the Institution being relieved from the occupation of its present very inadequate premises, and thus making a start on a new stage of its career. But unless extraneous aid be forthcoming, the cost of the building operations which are contemplated will result in the absorption of all the available capital, which has arisen from accumulated savings and life compositions, and the interest on this sum will be lost to the annual income.

It is conceived that this might embarrass the Institution in its future development, and since the Institution has become an indispensable adjunct to the Naval and Military Services, AN APPEAL IS NOW MADE TO ALL WHO ARE INTERESTED IN THE EFFICIENCY OF THE ARMY AND NAVY to contribute to raising £25,000 which will be required to re-house and re-equip the Royal United Service Institution.

Donations may be paid to the Secretary, Whitehall Yard, and to Messrs. Drummond, Bankers, Charing Cross.

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